



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at [wvOASIS.gov](http://wvOASIS.gov). As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at [WVPurchasing.gov](http://WVPurchasing.gov) with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header @ 59

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 807167

Procurement Type: Central Master Agreement

Vendor ID: VS000004719

Legal Name: Rohrer Enterprises Inc

Alias/DBA:

Total Bid: \$2,888,895.00

Response Date: 03/11/2021

Response Time: 12:18

Responded By User ID: TClawson

First Name: Teresa

Last Name: Clawson

Email: tclawson@rohrerbus.com

Phone: 800-735-3900

SO Doc Code: CRFQ

SO Dept: 0805

SO Doc ID: PTR210000008

Published Date: 3/2/21

Close Date: 3/11/21

Close Time: 13:30

Status: Closed

Solicitation Description: Addendum No 2 -Passenger Type Dual Rear Tire Van

Total of Header Attachments: 59

Total of All Attachments: 59



Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Passenger Type - Dual Rear Tire Van (non-raised Roof)	1.00000	EA	2888895.000000	2888895.00

Comm Code	Manufacturer	Specification	Model #
25101502			

**Commodity Line Comments:** Thank you for the opportunity to respond to this solicitation.  
Please see our cover letter and supporting documentation attached.

**Extended Description:**

Passenger Type Dual Rear Tire Van (non-raised Roof) - Vendors submitting bids electronically should enter the total bid amount as the unit price.

# ROHRER

School & Commercial Bus Sales

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March 11, 2021

Department of Administration  
Purchasing Division  
2019 Washington St. E  
Charleston, WV 25305

RE: PTR2100000008 Passenger Type Dual Rear Tire Van (Non-Raised Roof)

Dear Mr. Welch,

Rohrer Bus Sales appreciates the opportunity to submit a proposal for RFQ PTR21\*08 Passenger Type Dual Rear Tire Van (Non-Raised Roof). Our offerings, a Ford Transit with a Mobility Trans conversion meets the intent and letter of your specifications with the following documentation, clarifications and/or explanations set forth in the RFQ.

An area we would like to address to start is the Destination Sign Requirement in Section 4.4. Per the specifications and addendum Front and Side signs are to be provided on Classes D-I if available. We have attached a letter from the Van Converter and documentation that both Front and Side Destination Signs are available for the Ford Transit at Enclosure 1A. As they are available our proposal for Classes D-I include both Front and Side Signs. If other bidders submitted bids without these signs in order to lower their bid cost we do not believe they are in compliance with the specifications. Please See Picture of Ford Transit Equipped with Front and Side Signs Below:



# Table of Contents

Enclosure 1A	Destination Sign Letter from Manufacturer
Enclosure 1	Exhibit A Pricing Page
Enclosure 2	Signed Bid Forms, Bid Documents, No Debt Affidavit and Addendum Acknowledgement
Enclosure 3	Company History Service and Parts
Enclosure 4	Copy of Proposed Warranty
Enclosure 5	Additional Technical Proposal Supporting Documentation

Additional Items to be Addressed:

3.39 We Understand and Acknowledge the training requirements in this section and will work with the Division to formulate a plan to implement safely with Covid precautions.

10.2 H Location of Assembly:

Mobility Trans  
12633 Inkster Rd  
Livonia, MI 48150

10.2 D Available Ford OEM paint colors are provided in Enclosure 5 along with Sample Vinyl colors.

10.2I I A list of five (5) users names, addresses, emails and telephone numbers who have been provided similar equipment

## **REFERENCE #1: Pennsylvania Department of General Services**

Rohrer Bus Sales has held the state contract for Pennsylvania since 2007 and currently holds a contract. This contract contains shuttle bus products from 21' – 31' in length and includes Ford, Chevrolet and Freightliner chassis. This contract also includes wheelchair minivan conversions.

Contact: John Levitsky, Program Manager  
Department of General Services  
Bureau of Procurement  
555 Walnut Street, 6<sup>th</sup> Floor Forum Place  
Harrisburg, PA 17101  
717-787-1206  
[jlevitsky@pa.gov](mailto:jlevitsky@pa.gov)

## **REFERENCE #2: Federal Government's General Service Administration**

For over ten years, Rohrer Bus Sales has provided Ford and Freightliner chassis to the Federal government. Our current contract is GS-30F-DA024 and is in process of being renewed for the 3<sup>rd</sup> of 4 option periods. The annual volume on this contract is generally in the 40-50 buses per year range

Contact: Craig D. Yokum, Contract Officer  
U.S. General Services Administration/Federal Acquisition Service

Office of Travel, Transportation and Logistics  
Light Vehicles Branch - QMAAA  
1800 F Street, NW, 3rd Floor, Hub 3200  
Washington, DC 20405  
[craig.yokum@gsa.gov](mailto:craig.yokum@gsa.gov)  
Phone 703-605-9291  
Cell 571-748-8753

## **REFERENCE #3 - International Limousine Service**

Operates a fleet of 100+ shuttle buses including passenger and paratransit conversions. ILS is the Washington DC metropolitan's largest shuttle operator and holds commercial and GSA contracts throughout the area.

Contact: William DeGregory, Transportation Director  
International Limousine Service  
2300 T Street, NE  
Washington, DC 20002  
202-388-6800  
[bdigregory@internationallimo.com](mailto:bdigregory@internationallimo.com)

## **REFERENCE #4 - Harrisburg International Airport**

For over twenty years, Rohrer Bus Sales has provided Ford and Chevrolet cutaways, Freightliner M2, rear engine and low floor buses to HIA.

Contact: Robert Gardner, Vehicle Maintenance Supervisor  
513 Airport Drive  
Middletown, PA 17057  
717-948-3900  
[bobg@saraa.org](mailto:bobg@saraa.org)

**REFERENCE #5 - MOVTA**

Contract history extends for multiple years - Rohrer Bus Sales combined with Andrew Clawson management experience has provided Ford F-550, E-350 and E-450 buses to MOVTA.

Contact: Michael Kesterson  
Mid-Ohio Valley Transit Authority  
520 Juliana Street  
Parkersburg, WV 26101  
304.422.4100

Please contact us immediately at (800) 735-3900 if any additional documentation is required.  
Thank you for your consideration.

**Thanks,**  
**Andrew Clawson**  
Account Representative



**ROHRER**

1.800.735.3900 x 4152

804.357.1145 Cell

717.957.4884 Fax

[aclawson@rohrerbus.com](mailto:aclawson@rohrerbus.com)

# TRANSIGN®

YOUR DESTINATION BEGINS HERE



The LED Destinator® Series - perfect for fleets of all types - is available in a variety of sizes and colors to fit your installation and display needs. These versatile and highly adaptive signs offer full integration into Destination, Route, and Next Stop announcement services, always keeping your customers pointed towards their next destination.



## STANDARD FEATURES

- Destination Messages
- Next Stop Announcements
- Public Relations Messaging
- Scrolling/Flashing/Stacked Messages

## SOFTWARE AND PROGRAMMING

Our signs and control modules are pre-programmed and include FREE software. Advanced controllers are available for J1708/J1587 system integration and Hands-Free operation, ensuring the safest and most reliable performance for any fleet.



## AVAILABLE ADVANCED FEATURES INCLUDE:

- Automated GPS message progression
- Hands-Free operation for safety
- Voice Announcements
- J1708/J1587 integration compatible
- Automatic brightness control
- Basic programming software included (USB)
- Maintenance free- ZERO cost of ownership
- Many OCU options to suit your needs



## BUY AMERICA - MADE IN U.S.A.

Using the highest quality parts, our LED Destinator® Signs are proudly made in Detroit, Michigan USA in full compliance with the Buy America Act.

## LED DESTINATOR™ WARRANTY INFO

With a lifetime warranty that outlasts the lifetime of most vehicles (100,000 hours at full brightness), our signs will exceed your expectations in reliability and performance.



## ABOUT TRANSIGN

Established in 1959, Transign is a leading provider of high-quality signage for the transit industry. We remain committed to providing world-class U.S. based customer service and technical support.

Transign®, 281 Collier Road, Auburn Hills, Michigan 48326  
 Toll Free: 855.535.7446 | Main: 248.623.6400 | Fax: 248.623.2930  
[www.transignllc.com](http://www.transignllc.com)

# TRANSIGN®

YOUR DESTINATION BEGINS HERE

## LED Destinator® Electronic Signs - Dimensions

Signs	Pixel Count H x W (pixels)	Display H x W (in)	Enclosure H x W x D (in)
LD16160	16 x 160	6 1/2 x 63 1/8	9 1/2 x 64 3/8 x 2 3/8
LD16128	16 x 128	6 1/2 x 50 1/2	9 1/2 x 52 x 2 3/8
LD16112	16 x 112	6 1/2 x 44 1/8	9 1/2 x 45 3/4 x 2 3/8
LD1696	16 x 96	6 1/2 x 37 7/8	9 1/2 x 39 3/8 x 2 3/8
LD1680	16 x 80	6 1/2 x 31 5/8	9 1/2 x 33 x 2 3/8
LD1632	16 x 32	6 1/2 x 12 3/4	9 1/2 x 14 x 2 3/8
LD12112	12 x 112	4 7/8 x 44 1/8	8 x 45 3/4 x 2 3/8
LD1280	12 x 80	4 7/8 x 31 5/8	8 x 33 1/8 x 2 3/8
LD1232	12 x 32	4 3/4 x 12 3/4	8 x 14 x 2 3/8
LD896	8 x 96	3 1/4 x 37 7/8	6 3/8 x 39 3/8 x 2 3/8
LD864	8 x 64	3 1/4 x 25 1/4	6 3/8 x 26 3/4 x 2 3/8

Be sure to check out our other great products!



**Stop Request Signs**

- Flush, ceiling or surface mount
- Any font/color combination
- Back-lit by efficient LED's



**Interior Passenger Information Sign**

- Easy to install
- ADA compliant
- LED's rated at 100K hours



**Roller Curtain Signs**

- High-res logos & graphics
- Perfect for large fleets
- Virtually maintenance free
- Reliable, efficient LED backlight
- Available in 12 and 24 VDC
- Up to 120 destinations



**Run Number Box**

- Metal or plastic frame
- Available in 2, 3, or 4 digits
- Easy to read 4" lettering
- Spring loaded return
- Reliable, efficient LED backlight
- Virtually maintenance free



**LED Run Number Box**

- Steel enclosure
- ADA compliant
- Reliable LED's
- Multiple colors
- Automatic brightness
- 12 and 24 VDC

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[www.transignllc.com](http://www.transignllc.com)

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LED Destinator® Series

Est. 1959



## **TRANSIGN® FULL AMBER LED DESTINATION SIGNS –LED Destinator® Series**

Front and Side Electronic destination sign system shall comply with ADA regulations & meet Buy America requirements. Each sign shall include an automatic brightness sensor control with full amber LED's. Signs shall display stationary, scrolling, or flashing messages. Sign package will include programming software, and instructions configured on a thumb drive with each system. Complete sign system shall have a Lifetime Warranty. Operator control unit is programmable using a USB port accepting the agencies configured routes up to 999 preset routes using a thumb drive which shall be included with each system. Route setup or additional assistance by sign manufacturer must be available to the user. Control unit shall be located above the driver for easy usability. Front and side signs must be sized to the largest possible to fit the appropriate area per the bus manufacturers typical location and space allowed and operate on 12 VDC power.

### **Front LED Destination Sign:**

- Front destination sign shall be ADA compliant with a minimum LED display of 4.75”(H) x 31.50” (W)- 12 pixels high x 80 pixels wide, 960 pixels, as required for minimum viewing distance of up to 250'. Each LED must have a minimum size diameter of 10mm with a 10mm pitch.
- The destination message is readable by a person with 20/20 vision from a minimal distance of 250 feet. The sign has an equal readability at 65 degrees on either side of the line perpendicular to the center of the mean plane of the display. The entire display area of all signs is clearly visible and readable both in direct sunlight and at night.
- Front sign is capable of displaying scrolling or stacked text, with a fixed left margin to display route number.
- Front sign is installed high above the windshield enclosed in a suitable compartment.

### **Curb-Side LED Destination Sign:**

- Side destination sign shall be ADA compliant with a minimum LED display of 3.25”(H) x 25.25” (W)- 8 pixels high x 64 pixels wide, 512 pixels, required for minimum viewing distance of 100'. Each LED must have a minimum size diameter of 10mm with a 10mm pitch.
- The destination message is easily read from the sidewalk level. The entire display area of all signs is clearly visible and readable both in direct sunlight and at night.
- Side sign is capable of displaying scrolling text, and may display similar or different messages from the front.
- Side sign is located in a passenger window stationary behind the front entrance door or sliding door. Sign is mounted in top portion of side window.

# **Mobility**TRANS

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## **Paratransit & Passenger Vans**

To: Toby L Welch  
3019 Washington St. E  
Charleston, WV 25305

3-11-2021

From: Brian Beebe  
MobilityTRANS Sales Engineer  
12633 Inkster Rd  
Livonia, Mi. 48150  
(810) 417-0778

Dear Mr. Welch.

Based on Question 30 on Addendum 1, and Question 9 on Addendum 2 in conjunction with the state of West Virginia's answers. We feel like we need to highlight the fact that we in fact are able to provide a front and side destination sign on the Ford Transit. We have been installing the Transign front sign PN – LD1280, and Transign Side Sign PN – LD864 for over 3 years, on over 150 Ford Transit vans, with no alteration or change to the OEM van body.

**Q.30** On specification 4.4 - As OEM van bodies are requested in the specs, how does the State want front and side destination signs to be installed? Can photos be supplied?

**A.30** **IF there isn't any room available, or none of the destination sign manufacturers have any solution to this then a destination sign does not need to be installed.**

**Q.9** On specification 4.4 - For this type of specified van front destination signs are available but Side destination signs are not. Please advise if you would like the vendors to quote the vans with a Front destination sign as part of the base price. This will require a change to the van's header cap area to fit the destination sign

**A.9** **The Division will accept the front only destination sign only if the side one isn't available.**

After the opening and reviewing the bid, if the state of West Virginia would like references on current agencies operating MobilityTRANS Transit Vans with Destination Signs, please feel free to contact Rohrer Bus Sales, or my self at MobilityTRANS and we would be glad to provide them.

Thanks,  
Brian Beebe  
Sales Engineer  
[Brian@Mobilitytrans.com](mailto:Brian@Mobilitytrans.com)  
810-417-0078

## REQUEST FOR QUOTATION

### PASSENGER TYPE DUAL REAR TIRE VAN (NON-RAISED ROOF)

#### EXHIBIT A PRICING PAGE

CLASS	VEHICLE DISCRPTION	UNIT PRICE PER VEHICLE	ESTIMATED QUANTITY	EXTENDED PRICE
A	Vehicle with Two Wheelchair (WC) Positions	\$ 63,832.00	5	\$ 319,160.00
B	Vehicle with One Wheelchair (WC) Position	\$ 63,602.00	5	\$ 318,010.00
C	Vehicle Non-Accessible	\$ 52,449.00	5	\$ 262,245.00
D	Vehicle/ Two WC / Fixed Route Package	\$ 70,239.00	5	\$ 351,195.00
E	Vehicle One WC / Fixed Route Package	\$ 69,301.00	5	\$ 346,505.00
F	Vehicle / No WC / Fixed Route Package	\$ 57,048.00	5	\$ 285,240.00
G	Vehicle / Two WC/ Fixed Route Package Exterior Paint Scheme	\$ 71,979.00	5	\$ 359,895.00
H	Vehicle / One WC / Fixed Route Package Exterior Paint Scheme	\$ 71,041.00	5	\$ 355,205.00
I	Vehicle / No WC / Fixed Route Package / Exterior Paint Scheme	\$ 58,288.00	5	\$ 291,440.00

<b>TOTAL BID EVALUATION</b>	<b>\$ 2,888,895.00</b>
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<i>*Complete form provided.</i>
<i>*Please note these are only estimated quantities and do not reflect any guarantee of purchase.</i>
<i>*The DPT may purchase more or less as needed.</i>
<i>*Please do not alter pricing page.</i>



Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Centralized Request for Quote  
 Vehicles

<b>Proc Folder:</b> 807167			<b>Reason for Modification:</b>
<b>Doc Description:</b> Passenger Type Dual Rear Tire Van (Non Raised Roof)			
<b>Proc Type:</b> Central Master Agreement			
<b>Date Issued</b>	<b>Solicitation Closes</b>	<b>Solicitation No</b>	<b>Version</b>
2021-02-16	2021-03-04 13:30	CRFQ 0805 PTR2100000008	1

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

**Vendor Customer Code:** VS0000004719

**Vendor Name :** Rohrer Enterprises, Inc. DBA Rohrer Bus Sales

**Address :** 2075-B  
**Street :** West Main Street  
**City :** Waynesboro  
**State :** VA **Country :** USA **Zip :** 22980

**Principal Contact :** Andrew Clawson, Regional Manager

**Vendor Contact Phone:** 804-357-1145 **Extension:**

**FOR INFORMATION CONTACT THE BUYER**  
 Toby L Welch  
 (304) 558-8802  
 toby.l.welch@wv.gov

Vendor Signature X 

FEIN# 23-2059976

DATE 3-4-21

All offers subject to all terms and conditions contained in this solicitation



Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

**State of West Virginia  
 Centralized Request for Quote  
 Vehicles**

<b>Proc Folder:</b> 807167		<b>Reason for Modification:</b> Addendum No. 1 - issued to answer vendor's questions
<b>Doc Description:</b> Passenger Type Dual Rear Tire Van (Non Raised Roof)		
<b>Proc Type:</b> Central Master Agreement		
<b>Date Issued</b>	<b>Solicitation Closes</b>	<b>Solicitation No</b>
2021-03-01	2021-03-11 13:30	CRFQ 0805 PTR2100000008
		<b>Version</b>
		2

<b>BID RECEIVING LOCATION</b>
BID CLERK DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION 2019 WASHINGTON ST E CHARLESTON WV 25305 US

<b>VENDOR</b>		
Vendor Customer Code: VS0000004719		
Vendor Name :Rohrer Enterprises, Inc., DBA/Rohrer Bus Sales		
Address : 2075-B		
Street :West Main Street		
City : Waynesboro		
State : VA	Country :USA	Zip : 22980
Principal Contact : Andrew Clawson, Regional Manager		
Vendor Contact Phone: 804-357-1145/800-735-3900 Extension: 4151		

<b>FOR INFORMATION CONTACT THE BUYER</b>
Toby L Welch (304) 558-8802 toby.l.welch@wv.gov

Vendor Signature X	FEIN# 23-2059976	DATE 3-4-21
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All offers subject to all terms and conditions contained in this solicitation



**ADDITIONAL INFORMATION**

The West Virginia Purchasing Division for the Agency, The West Virginia Division of Public Transit, is soliciting bids from qualified vendors to establish an "Open-End" contract for the purchase of Passenger Type Dual Rear Wheel (DRW) Vans (Non Raised Roof), converted for forward facing wheelchair spaces, fold down flip seats and /or fixed seats with air conditioning / heat, wheelchair securements and lift per the Specifications, Terms & Conditions and bid requirements as attached.

INVOICE TO	SHIP TO
PUBLIC TRANSIT DIVISION OF BLDG 5 RM 650 1900 KANAWHA BLVD E CHARLESTON WV 25305-0432 US	PUBLIC TRANSIT DIVISION OF KANAWHA VALLEY REGIONAL TRANSPORTATION AUTHORITY 1550 FOURTH AVE CHARLESTON WV 25324 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Passenger Type - Dual Rear Tire Van (non-raised Roof)	1.00000	EA		

Comm Code	Manufacturer	Specification	Model #
25101502			

**Extended Description:**

Passenger Type Dual Rear Tire Van (non-raised Roof) - Vendors submitting bids electronically should enter the total bid amount as the unit price.

**SCHEDULE OF EVENTS**

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
1	Questions due by 2/25/21 4:00 p.m.	2021-02-25

	Document Phase	Document Description	Page
PTR210000008	Final	Passenger Type Dual Rear Tire Van (Non Raised Roof)	3

**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Andrew Clawson, Regional Manager

(Name, Title)

Andrew Clawson, Regional Manager

(Printed Name and Title)

2075 B West Main Street Waynesboro, VA 22980

(Address)

804-357-1145/ or 800-735-3900 ext 4151

(Phone Number) / (Fax Number)

aclawson@rohrerbus.com

(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales

(Company)



Regional Manager

(Authorized Signature) (Representative Name, Title)

Andrew Clawson, Regional Manager

(Printed Name and Title of Authorized Representative)

3-4-21

(Date)

804-357-1145/ or 800-735-3900 ext 4151

(Phone Number) (Fax Number)

REQUEST FOR QUOTATION  
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

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**BID FORM #1**

**MANDATORY BID FORM – MUST BE SUBMITTED WITH BID**

Location(s) of the Technical Service Representative(s) and parts distribution center(s) closest or in the State of West Virginia.

**Location(s) of the technical service representative(s).**

**Name:** Ryan Renninger \_\_\_\_\_

**Address:** 1515 State Road PO Box 100 \_\_\_\_\_

Duncannon, PA 17020 \_\_\_\_\_

**Telephone:** 1-800-735-6700 \_\_\_\_\_

**Name:** Andrew Clawson \_\_\_\_\_

**Address:** 2075 B West Main Street \_\_\_\_\_

Waynesboro, VA 22980 \_\_\_\_\_

**Telephone:** 804-357-1145/ or 800-735-3900 ext 4151 \_\_\_\_\_

**Location(s) of parts distribution center(s).**

**Name:** Rohrer Bus Sales \_\_\_\_\_

**Address:** 1515 State Road PO Box 100 \_\_\_\_\_

Duncannon, PA 17020 \_\_\_\_\_

**Telephone:** 1-800-735-6700 \_\_\_\_\_

**Name:** NA \_\_\_\_\_

**Address:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_

REQUEST FOR QUOTATION  
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

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**BID FORM #2**

**CERTIFICATION FOR AIR & WATER POLLUTION  
MANDATORY BID FORM – MUST BE SUBMITTED WITH BID**

The Vendor certifies that the vehicles proposed:

**ARE**  in compliance with the regulations in 40 CFR Part 85, 40 CFR Part 86, 40 CFR Part 600, Clean Water Act and the air/water pollution criteria established by the Environmental Protection Agency of the United States Government.

**ARE NOT**  in compliance with the regulations in 40 CFR Part 85, 40 CFR Part 86, 40 CFR Part 600, Clean Water Act and the air/water pollution criteria established by the Environmental Protection Agency of the United States Government.

3-4-21

Date



Authorized Signature

Regional Manager

Title

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales

Company Name

REQUEST FOR QUOTATION  
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

**BID FORM #3**

**DISADVANTAGED BUSINESS ENTERPRISE  
VENDORS/ MANUFACTURERS CERTIFICATION**

**MANDATORY BID FORM – MUST BE SUBMITTED WITH BID**

**(Check appropriate statement)**

The Vendor, if a transit vehicle manufacturer, hereby certifies that it has complied with the requirements of 49 CFR Section 26.49 by submitting an annual DBE goal to the Federal Transit Administration (FTA). The goal has either been approved or not disapproved by FTA.

The Vendor, if a non-manufacturing supplier, hereby certifies that the manufacturer of the transit vehicle to be supplied has complied with the above-referenced requirement of 49 CFR Section 26.49.

3-4-21

Date



Authorized Signature

Regional Manager

Title

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales

Company Name

REQUEST FOR QUOTATION  
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

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**BID FORM #4**

**BUY AMERICA CERTIFICATION  
ROLLING STOCK  
MANDATORY BID FORM – MUST BE SUBMITTED WITH BID**

**Certificate of Compliance**

The bidder or offeror hereby certifies that it will comply with the requirements of section 165(b) (3), of the Surface Transportation Assistance Act of 1982, as amended, and the applicable regulations of 49 CFR 661.11:

3-4-21

Date



Authorized Signature

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales

Company Name

Andrew Clawson

Name

Regional Manager

Title

**Certificate for Non-Compliance**

The bidder or offeror hereby certifies that it cannot comply with the requirements of section 165(b) (3) of the Surface Transportation Assistance Act of 1982, as amended, but may qualify for an exception to the requirement consistent with section 165(b) (2) or (b) (4) of the Surface Transportation Assistance Act, as amended, and the applicable regulations in 49 CFR 661.7.

Date

Authorized Signature

Company Name

Name

Title

REQUEST FOR QUOTATION  
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

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**BID FORM #5**

**FEDERAL MOTOR VEHICLE  
SAFETY STANDARDS CERTIFICATION**

**MANDATORY BID FORM – MUST BE SUBMITTED WITH BID**

The vendor hereby certifies that it shall submit, as required by Title 49 of the CFR, Part 663 - Subpart D, its self-certification information stating that the vehicle(s) will comply with the relevant Federal Motor Vehicle Safety Standards issued by the National Highway Traffic Safety Administration in Title 49 of the Code of Federal Regulations, Part 571.

3-4-21

Date



Authorized Signature

Regional Manager

Title

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales

Company Name



REQUEST FOR QUOTATION  
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

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**BID FORM #7**

**MANDATORY BID FORM – MUST BE SUBMITTED WITH BID  
CERTIFICATION OF PRIMARY PARTICIPANT REGARDING  
DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS**

The Primary Participant (applicant for an FTA grant or cooperative agreement, or potential contractor for a major third party contract),

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales (COMPANY NAME) certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

If the primary participant (applicant for an FTA grant, or cooperative agreement, or potential third party contractor) is unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.)

THE PRIMARY PARTICIPANT (APPLICANT FOR AN FTA GRANT OR COOPERATIVE AGREEMENT, OR POTENTIAL CONTRACTOR FOR A MAJOR THIRD PARTY CONTRACT),  
Andrew Clawson, Regional Manager, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET SEQ. ARE APPLICABLE THERETO.



Regional Manager

Signature and Title of Authorized Official

REQUEST FOR QUOTATION  
Passenger Type, Dual Rear Wheel Van Non-Raised Roof

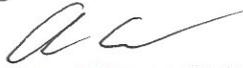
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**BID FORM #8**  
**MANDATORY BID FORM – MUST BE SUBMITTED WITH BID**  
**2021**  
**VENDOR'S CERTIFICATION OF**  
**UNDERSTANDING AND ACCEPTANCE**

The Vendor hereby certifies that all Technical Specifications and Contract Terms and Conditions have been carefully reviewed, are fully understood and shall be adhered to in performance and completion of any contract resulting from this bid.

3-4-21

\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Authorized Signature

Regional Manager

\_\_\_\_\_  
Title

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales  
Company Name

**SPECIFICATION COMPLIANCE**

**NOTE: Please check if what is offered is in exact compliance with specifications. **Any discrepancies must be listed as an attachment to the bid proposal. Exact dimensions and/or descriptions must be provided as a part of the Vendor's bid proposal when submitted.****

Bid proposal submitted meets and/or exceeds all specification requirements.

Bid proposal submitted contains deviations from specification requirements. Detailed descriptions of these deviations have been provided with this bid proposal.

REQUEST FOR QUOTATION  
Passenger Type, Dual Rear Wheel Van Non-Raised Roof

**BID FORM #9**  
**MANDATORY BID FORM – MUST BE SUBMITTED WITH BID**

**CERTIFICATION OF RESTRICTIONS ON LOBBYING**

The undersigned (Vendor, Contractor) certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influence or attempt to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress regarding the award of a Federal grant, loan (including a line of credit), cooperative agreement, loan guarantee, or loan insurance, or the extension, continuation, renewal, amendment, or modification of any Federal grant, loan (including a line of credit), cooperative agreement, loan guarantee, or loan insurance.
2. If any funds other than Federal appropriated funds have been or will be paid to any person to influence or attempt to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or any employee of a Member of Congress in connection with any application for a Federal grant, loan (including a line of credit), cooperative agreement, loan guarantee, or loan insurance, the undersigned assures that it will complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," Rev. 7-97; and
3. The undersigned understands that the language of this certification shall be included in the award documents for all sub awards at all tiers (including subcontracts, sub grants, sub agreements, and contracts under grants, loans (including a line of credit), cooperative agreements, loan guarantees, and loan insurance.

Undersigned understands that this certification is a material representation of fact upon which reliance is placed by the Federal government and that submission of this certification is a prerequisite for providing a Federal grant, loan (including a line of credit), cooperative agreement, loan guarantee, or loan insurance for a transaction covered by 31 U.S.C. 1352. The undersigned also understands that any person who fails to file a required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The (Vendor, Contractor) Rohrer Enterprises, Inc. DBA Rohrer Bus Sales certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the (Vendor, Contractor) understands and agrees that the provisions of 31 U.S.C. §§ 3801, et seq., apply to this certification and disclosure.

3-4-21

Date

  
Authorized Signature

Regional Manager

Title

**BID FORM #10**

REQUEST FOR QUOTATION  
Passenger Type, Dual Rear Wheel Van Non-Raised Roof

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**REQUIRED BID DOCUMENTATION CHECKLIST**

Model Year: 2021

Model: FORD TRANSIT 350

**Mandatory Bid Forms – must be submitted with bid:**

- Bid Form #1: Locations of Technical Service Representatives and Parts Distribution Centers
- Bid Form #2: Certification for Air & Water Pollution
- Bid Form #3: Disadvantaged Business Enterprise Vendors/Manufacturers Certification
- Bid Form #4: Buy America Certification Rolling Stock
- Bid Form #5: Federal Motor Vehicle Safety Standards Certification
- Bid Form #6: U.S. Comptroller's Debarment List Certification
- Bid Form #7: Certification of Primary Participant Regarding Debarment, Suspension, and Other Responsibility Matters
- Bid Form #8: Vendor's Certification of Understanding and Acceptance
- Bid Form #9: Certification of Restrictions on Lobbying
- Exhibit A Pricing Page

REQUEST FOR QUOTATION  
Passenger Type, Dual Rear Wheel Van Non-Raised Roof

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**Documentation – to be submitted with bid:**

**Referenced**

- 3.3.1.1 Engine: 3.5 Liter EcoBoost V-6 gasoline engine – provide product description, warranty information and product literature.
- 3.3.2 High Idle System: provide product description, warranty information and product literature.
- 3.5.3 Transmission (separate cooling system): provide product description, warranty information and product literature.
- 3.6.1 Back Up Camera System: provide product description, warranty information and product literature.
- 3.11 Tires: provide product description, warranty information and product literature.
- 3.12.1 Alternator: provide product description, warranty information and product literature.
- 3.16.1 Exterior Vinyl Colors: provide samples/chart of available colors.
- 3.17.1 Undercoating and Rustproofing: provide product description, warranty information and literature.
- 3.18.3 Ambulatory Passenger Entrance/Exit: provide location, size, door operating details.
- 3.20.2 Stepwell Heater: provide product description, warranty information and product literature.
- 3.23.5 Floor Covering: provide samples of floor covering and colors to be provided.
- 3.27 Seating: provide product description, warranty information, product literature and color charts for all of the seating products to be utilized. **Proposed floor plans.**
- 3.27.16 Driver's Seat: provide description of product.
- 3.30.3 Exterior Mirrors: provide product description, warranty information and product literature.
- 3.31.1 Dual Purpose Safety Vent: provide product description, warranty information and product literature.
- 3.22 Wheelchair Securement System: provide product description, warranty information and product literature.

REQUEST FOR QUOTATION  
Passenger Type, Dual Rear Wheel Van Non-Raised Roof

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- 3.27.14 Strap/Buckle Storage: provide description and location of product.
- 3.33 Wheelchair Occupant Restraint System: provide product description, warranty information and product literature.
- 3.34.1 Wheelchair Lift: provide Make, Model #, product description, warranty information and product literature.
- 3.36 AM/FM Radio/CD: provide product description, warranty information and product literature.
- 3.39 Training: submit letter of understanding to the terms in this Section.
- 4.4 Fare box Provisions: provide description of proposed location.
- 4.4 Destination Signs: provide product description, warranty information and product literature.
- 4.4 PA System: provide product description and product literature.
- 4.4 Strobe Light: provide product description and product literature.
- 3.28.5 Security Cameras Only: provide product description, warranty information and product literature.
- 5.9.1 Warranty on complete vehicle.
- 5.9.2 Warranty on Basic Vehicle Structure.
- 5.9.4 Warranty: warranties to be provided on subsystems and components.
- 6.8.2 Complete two (2) bids in binder form – one (1) marked for DPT.
- 10.2 A. Complete mechanical description of vehicle, its construction and equipment including manufacturer's model name and /or number. Include description of front and rear air conditioning and heat systems.
- 10.2 B Proposed interior floor plans, showing detailed dimensions including the location of the wheelchair securement system and stanchions.
- 10.2 C. Curb weight (empty weight) and gross vehicle weight rating (GVWR) of vehicle.
- 10.2 D. Samples or paint charts of available exterior paint colors and vinyl.

REQUEST FOR QUOTATION  
Passenger Type, Dual Rear Wheel Van Non-Raised Roof

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- 10.2 H. Identification of the conversion location of the van.
- 10.2 I. A list of five (5) users names, addresses, emails and telephone numbers who have been provided similar equipment by the Vendor.
- No Debt Affidavit
- Addendum Acknowledgement

STATE OF WEST VIRGINIA  
Purchasing Division

# PURCHASING AFFIDAVIT

**CONSTRUCTION CONTRACTS:** Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

**ALL CONTRACTS:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

**DEFINITIONS:**

**"Debt"** means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

**"Employer default"** means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

**"Related party"** means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: Rohrer Enterprises, Inc. DBA Rohrer Bus Sales

Authorized Signature:  Date: 3-4-21

State of VA

County of AUGUSTA, to-wit:

Taken, subscribed, and sworn to before me this 4TH day of MARCH, 2021.

My Commission Expires JUNE 30, 2022.



NOTARY PUBLIC Jessica Clawson

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: PTR2100000008**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3            | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Rohrer Enterprises, Inc., DBA/Rohrer Bus Sales

Company



Authorized Signature

3-4-21

Date

**NOTE:** This addendum acknowledgment should be submitted with the bid to expedite document processing.  
Revised 6/8/2012

# ROHRER

School & Commercial Bus Sales

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## Company History

### **Rohrer Bus... four generations of transportation experience.**

Rohrer's history all began in the early 1920's when Howard E. Rohrer Sr. started transporting school children with his horse and wagon in Allen's Cove, just south of Duncannon, Pennsylvania. The early horse-and-wagon evolved to a few wooden school bus bodies being built on car chassis'. Over the years, the need for student transportation grew. That's the way Rohrer Bus began.

Now fast forward to 1975. Howard E. Rohrer Jr. was running the business and our school bus fleet had grown to 70 buses. In addition to our growing school transportation service, Rohrer Bus added a Sales company and teamed up with Wayne school buses to represent their products. It was soon apparent that our **school bus company** was quickly outgrowing the facility on the family farm. So, in 1976, ground was broken for a new sales and service facility where our headquarters remain today.

By 1981, the 3rd generation of the Rohrer family was well on their way to continuing our company's transportation legacy. H.E. "Skip" Rohrer III and his brother-in-law John Schrantz, who continue to oversee the business operations today, took over the company from H.E. Rohrer Jr. By this time, our operating fleet had grown to over 200 buses and, in 1982, we became a dealer for Champion Bus selling commercial buses.

In the fall of 1999, Rohrer Bus Sales proudly became the Thomas Built Bus dealer for the much of the state of Pennsylvania. Our experience in the sale and operation of school and commercial buses, along with our reputation for providing outstanding customer service made Rohrer the logical choice when Thomas Built Buses was looking for a full-service dealership to partner with. And in 2006, just one year after receiving the Pennsylvania School Bus Association's (PSBA) Platinum Bus Award for 75 years of service to the transportation industry, Rohrer Bus was celebrated as the Thomas Built Bus Dealer of the Year.

Today, the 4th generation of the Rohrer transportation legacy is now in place with Tahva Rohrer Wylie and David Schrantz continuing our family's dedication to the transportation industry. We currently sell vehicles throughout the mid-Atlantic states of Pennsylvania, Maryland, New Jersey, Delaware, and Virginia. Rohrer Bus offers a complete lineup of vans and buses ranging from small, wheelchair-accessible passenger vans to 90-passenger buses. On top of that, we are a FULL service dealer with factory-trained, ASE certified technicians providing factory approved service and warranty repairs for the ENTIRE bus.

In addition to our dealership growth, over fifteen (15) Pennsylvania school districts, intermediate units, and other entities rely on our fleet of over 500 vehicles to provide them with safe transportation services for their students. Our Duncannon headquarters has expanded several times, now with over 30,000 square feet, offering complete support along with the latest tools and equipment. With that, we are proud to be recognized as Perry County's largest employer. In addition to our Duncannon facility, Rohrer Bus has instituted several satellite facilities located throughout our growing sales territory.

Although we may have grown much larger over our many years in business, our Rohrer Bus family still prides itself on one thing: providing the very best transportation products and services available. With over 1000 years of combined industry experience, we can handle just about any transportation need, while consistently demonstrating our commitment to the highest level of quality, safety, and customer service. So, as **"The Transportation Company You Can Depend On"**, we look forward to a very long and successful relationship as your partner in safe and reliable transportation!

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1515 State Road, P.O. Box 100, Duncannon, Pennsylvania 17020 • OFFICE 717.957.2141 • TOLL FREE 800.735.3900 • FAX 717.957.4884

[rohrerbus.com](http://rohrerbus.com)

# **ROHRER**

*School & Commercial Bus Sales*

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## Warranty Service & Product Recalls

When buying a vehicle from Rohrer Bus, you can rest assured that you will be taken care of long after the sale. Our dedicated account representatives, Ryan Renninger (warranty) and Greg Kline (parts), are committed to service. They are here to help you from 8am – 4:30pm Monday thru Friday. Mr. Renninger is hands on and our most knowledgeable employee regarding warranty. Mr. Renninger and Mr. Kline can be reached at 1-800-735-3900.



# ROHRER

## School & Commercial Bus Sales

When you purchase a vehicle you are fully aware that, at some point, you will need to repair it. That is why Rohrer Bus has stocked our bus parts warehouse with items from the most reputable manufacturers in the business. We've built our reputation as a leading commercial and school bus parts dealer by partnering with highly regarded manufacturers like Thomas Built Buses®, AutoAbility, Braun Corporation, Champion Bus, El Dorado National, Federal Coach, General Coach, Krystal Coaches, StarTrans, and Vehicle Production Group (VPG). By working with such well-regarded industry leaders, Rohrer Bus is able to provide the exact bus parts that you are looking for.

### A Massive Inventory of Bus Parts For Sale

At Rohrer Bus, our customers operate vehicles in all models, sizes, and from just about every different model year. Because of this, our inventory of bus parts for sale is massive. Even if we do not have the exact part that you need in our warehouse, we have the resources to locate it and get it to you quickly. Don't spend your time scouring for bus parts online. Call our friendly team of bus parts experts and let us get you what you are looking for quickly.



Parts Stock Room

### A Transportation Company You Can Depend On.

Rohrer Bus is a company that provides the safest and most efficient [bus transportation services](#) and solutions available. We're large enough to offer the best products and services in the industry, but small enough to provide all of our customers with the personalized attention they deserve. If we don't have the bus parts that fit your needs, we have the resources available to find it. [Contact us](#) to learn more about our complete selection of bus parts for sale or call 1-888-594-3135!

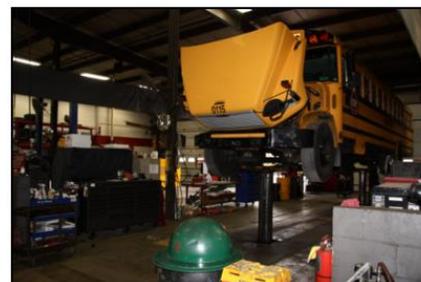
## Service Offerings

Rohrer Bus is a full-service transportation equipment maintenance facility. No matter how minor or serious your vehicle's problem is, we have the resources to fix it. With over 500 years of combined bus and automotive experience, our shop maintenance personnel are equipped to get your vehicle back on the road quickly. Our goal is to be your preferred bus service company, and we won't let you down!



### Our Service Capabilities

- Major / minor [bus repairs](#)
- Factory trained – certified technicians
- Engine Warranty – Cummins, CAT, Mercedes / Detroit
- Lift repair & Warranty – Braun, Ricon, Maxon
- Hand Controls – Mobility Driving Aids
- Air Conditioning – ACT, Trans-Air, AC Carrier
- Front End / All Wheel Alignment – Minivans through Class Truck & Buses
- Custom Preventative Maintenance Packages
- Emergency Vehicle Repairs – Ambulance / Fire Apparatus
- Automatic Tire Chain Installation & Repair
- D.O.T Inspection
- PA State Inspection
- Open till 6:00 AM till 11:00
- Call us: 1-888-594-3135



# ROHRER

School & Commercial Bus Sales

## Service Training & Information

### Training

[Calendar](#)  
[Registration](#)  
[Mailing List](#)

### E Learning

[Learning Center](#)  
[Arvin Meritor](#)  
[Bendix](#)

### OEM Literature

[Manuals](#)  
[Videos](#)



Welcome to Rohrer's Service Information Training page. Here you will find our training schedule along with a registration page where you can register for a up and coming class. If you don't see the class your looking for feel free to sign up on our wait list. As soon as we have your class scheduled we will contact you with the details.

We also offer ELearning 24/7 here you can find learning content available to you around the clock. You can study at your convenience and all you need is either a pc, tablet or phone and an internet connection.

Looking for R & R instructions or a wiring diagram look no further. Under OEM Literature we have manuals, wiring diagrams and even some videos. If you don't see what your looking for then contact our support department at 1-888-594-3135 ext. 731.

For questions and suggestions feel free to contact us.  
Training Department  
Email: [info@rohrerbus.com](mailto:info@rohrerbus.com)  
1-717-418-4443



### Body Shop

Rohrer Bus is one of the only full-service body shops in the area for buses and large vehicles. Our team of experienced body shop technicians can handle just about any variety of body and/or structural damage to your vehicle.

[Read More](#)



### Bus Repair

At Rohrer Bus, we do more than sell top-quality new and pre-owned buses and vans. We also provide reliable bus repair service that can keep your vehicles operating at peak efficiency while helping to reduce your total cost of ownership.

[Read More](#)



### Vehicle Graphics

Looking for the perfect design for your custom vehicle graphics? Then you have come to the right place! The Rohrer Bus custom graphics team can supply you with the design and installation of all your vinyl graphics and vehicle lettering needs.

[Read More](#)

PLEASE VISIT

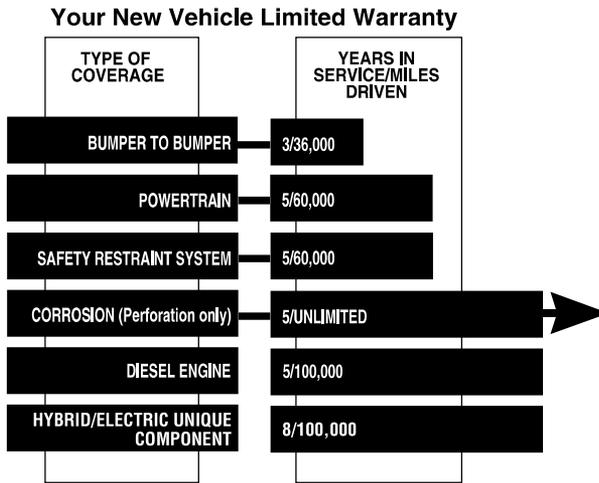
[WWW.ROHRERBUS.COM](http://WWW.ROHRERBUS.COM) FOR MORE DETAILED INFORMATION REGARDING THE ABOVE MENTIONED SERVICES.

## QUICK REFERENCE: WARRANTY COVERAGE

This chart gives a general summary of your warranty coverage provided by Ford Motor Company under the **New Vehicle Limited Warranty**. Please refer to the description of warranty coverage for more specific information.

For each type of coverage, the chart shows two measures:

- years in service
- miles driven



The measure that occurs first determines how long your coverage lasts. For example: Your Bumper to Bumper Coverage lasts for three years - unless you drive more than 36,000 miles before three years elapse. In that case, your coverage ends at 36,000 miles.

For more details on coverage, see:

- ➔ **What is Covered?** (pages 9-13)
- ➔ **What is Not Covered?** (pages 13-16)



## Limited Warranty

End User \_\_\_\_\_ Vin # \_\_\_\_\_

Congratulations on the purchase of your MobilityTRANS converted vehicle. We are committed to excellence not only on the build of your product, but in the customer service after you have taken delivery. Please know that if any problems do arise on the installation of equipment or with materials fabricated by MobilityTRANS you are covered for the first year from the date you took ownership with no mileage restriction. Please refer to the information below for specifics on your coverage and claim procedures. Thank you for choosing MobilityTRANS.

### Warranty Description

**Warranty Period:** One (1) Year from date of delivery, Unlimited Mileage

**Coverage:** The original owner is covered for any defects in the workmanship and/or materials used to convert your vehicle. This is limited to materials fabricated and installed by MobilityTRANS.

**Coverage Limitations:** This warranty is non-transferable. MobilityTRANS will not cover items we determine have been damaged by neglect, misuse, accidents, unauthorized alterations, or failure to provide reasonable maintenance. MobilityTRANS is also not responsible for reimbursement for travel to and from a repair facility.

### Claim Procedure

**TO START THE WARRANTY PROCEDURE, CONTACT YOUR SELLING DEALER BEFORE ATTEMPTING CORRECTIONS WITHOUT AUTHORIZATION.**

**The selling dealer must contact MobilityTRANS before any corrective action is taken.** Notice must be by email or phone. **MobilityTRANS must respond and approve any corrective action before it is performed.** Once contacted MobilityTRANS will determine the best course of action to minimize time and inconvenience to you. All charges for repairs must be pre-approved. MobilityTRANS will pay the repair facility directly.

**Additional Warranty Coverage:** The chassis, engine, drivetrain, aftermarket air conditioning, seats, wheelchair lift, wheelchair tiedowns, aftermarket electronic components, lights and additional items not listed, are covered by separate warranties from their manufacturer. Warranty registration and claims procedures for these items are provided to the original owner in a delivery packet. MobilityTRANS does not warranty components not manufactured by MobilityTRANS. However, MobilityTRANS does warranty our installation of most equipment. Sometimes it's hard to be sure which warranty covers an issue, please contact your selling dealer for advice on how to proceed before having any repairs performed.

**Please sign below to acknowledge this warranty:**

Sign \_\_\_\_\_ Print Name: \_\_\_\_\_

Date: \_\_\_\_\_

Scan and email this form to:  
[jessica@mobilitytrans.com](mailto:jessica@mobilitytrans.com) or  
[geri@mobilitytrans.com](mailto:geri@mobilitytrans.com)

# SCHOOL AND SHUTTLE BUS ROOF HATCHES

**TRANSPEC**<sup>®</sup>  
A Safe Fleet Brand

**SAFE EGRESS. PROVEN PERFORMANCE.**



**ADAPTABLE**  
Low profile design  
adapts to wide range of  
roof surfaces



**MADE IN THE USA**  
Proudly manufactured  
in North Carolina  
with 35 years proven  
product performance



**MAINTENANCE**  
No external fasteners  
required for installation



**WARRANTY**  
5 year



**STRENGTH**  
Constructed of high  
strength UV stable  
materials



Serves as a vent on hot summer days

# SPECIFICATIONS

## SCHOOL AND SHUTTLE ROOF HATCHES

■ = Standard O = Optional

MODEL	STANDARD FEATURES & OPTIONS	COLORS				FRESH AIR VENT				EMERGENCY EXIT				APPLICATIONS				SIZES			
		White	Light Gray	Dark Gray	Beige	Static Vent	Emergency Exit	Low Profile	Outside Release Handle	Retention Cable	Hatch Alarm Switch	Bilingual Decals	Shuttle	Coach	Transit	School	North American 610mm x 610mm	World Hatch 530mm x 970mm	Pro Lo 596mm x 596mm		
<b>T1170 Series Triple Value Safety Vent II</b>	White Light Gray Dark Gray	■	■	■	■	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
<b>T1670 Series Power Safety Vent II</b>	White Light Gray Dark Gray Beige	■	■	■	■	○	○	○	○	○	○	○	○	○	○	○	○	○			
<b>T1970 Series Standard Safety Vent II</b>	White Light Gray Dark Gray Beige	■	■	■	■	○	○	○	○	○	○	○	○	○	○	○	○	○			
<b>9245 Series Pro Lo Roof Hatch</b>	White Light Gray Dark Gray	■	■	■	■	○	○	○	○	○	○	○	○	○	○	○	○	○			

### T1170 Series / Triple Value Safety Vent II

The Triple Value Safety Vent II is a combination roof ventilator/emergency exit that provides 5-position fresh air ventilation as well as incorporating a built in non-closeable static exhaust vent. The product also includes a simple release handle that allows the hatch to hinge open for emergency exit.



#### Additional Features

- Static Vent provided with one piece outer cover designed to minimize leaks
- Interchangeable with earlier Transpec models
- Available in various radiuses to fit different roof curvatures
- Available with vandal lock feature
- Constructed of high strength UV stable materials
- Available with optional adhesive sealant and reflective tape
- Meets D250 Standard for Canadian school bus

### T1670 Series / Power Safety Vent II

The Power Safety Vent II provides all the features of the Triple Value Safety Vent II with the addition of an electric fan for extracting condensation, stale or hot air from inside the vehicle to improve passenger comfort.



#### Additional Features

- Interchangeable with earlier Transpec models
- Available in 12 and 24 volt
- Available in various radiuses to fit different roof curvatures
- Constructed of high strength UV stable materials
- Available with optional adhesive sealant and reflective tape
- Meets D250 Standard for Canadian school bus

### T1970 Series / Standard Safety Vent II

The Standard Safety Vent II is a combination roof ventilator/emergency exit that provides 5-position fresh air ventilation and a simple release handle that allows the hatch to hinge open for emergency exit.



#### Additional Features

- Retrofits to all hatch openings
- Interchangeable with earlier Transpec models
- Available in various radiuses to fit different roof curvatures
- Constructed of high strength UV stable materials
- Available with optional adhesive sealant and reflective tape

### 9245 Series / Pro Lo Roof Hatch

The Pro Lo is a combination roof ventilator/emergency exit that mounts nearly flush with the roof (0.75" above the roof). Designed to fit the roof curvature, it creates a tight seal virtually eliminating water intrusion. The hatch also incorporates a release handle allowing it to be opened as an emergency exit.



#### Additional Features

- Available in various radiuses to fit different roof curvatures
- Nearly flush at 0.75" above the bus
- Constructed of high strength UV stable materials
- No exterior screws for installation
- Available with vandal lock feature
- Meets D250 Standard for Canadian school bus

## 2021 Transit > Performance and Capability > Engines

### 3.5L EcoBoost V6

#### PORT FUEL (PFI) AND DIRECT-INJECTION (DI) FUEL SYSTEM

- Port Fuel (PFI) and Direct-Injection (DI) Fuel System
  - Referred to as PFDI, this dual-delivery system features two fuel injectors per cylinder
  - These injectors work together to improve power output, efficiency and emissions
  - One injector located in each intake port where air enters the cylinder (Port Injection)
  - One injector located inside each combustion chamber (Direct-Injection)

#### CYLINDER BLOCK

- Die-cast aluminum engine block is strong, yet lightweight
- Forged-steel, fully counterweighted crankshaft with 6-bolt press-fit main bearing caps for strength and durability
- Piston-cooling engine oil jets help improve oil warm-up and maintain cooler piston temperatures for improved durability

#### VALVETRAIN

- Dual overhead camshaft (DOHC), lightweight aluminum cylinder heads with 4 valves per cylinder
  - Roller-finger follower valvetrain
  - Hollow camshafts reduce the weight of the valvetrain
- Twin independent variable camshaft timing (Ti-VCT)
- Uses a timing chain

#### DEEP-SUMP OIL PAN

- Die-cast aluminum deep-sump oil pan
  - Optimized oil pan capacity to provide up to 1-year/10,000-mile oil change intervals

#### ENGINE POWER

##### 3.5L EcoBoost V6 (RWD/AWD)

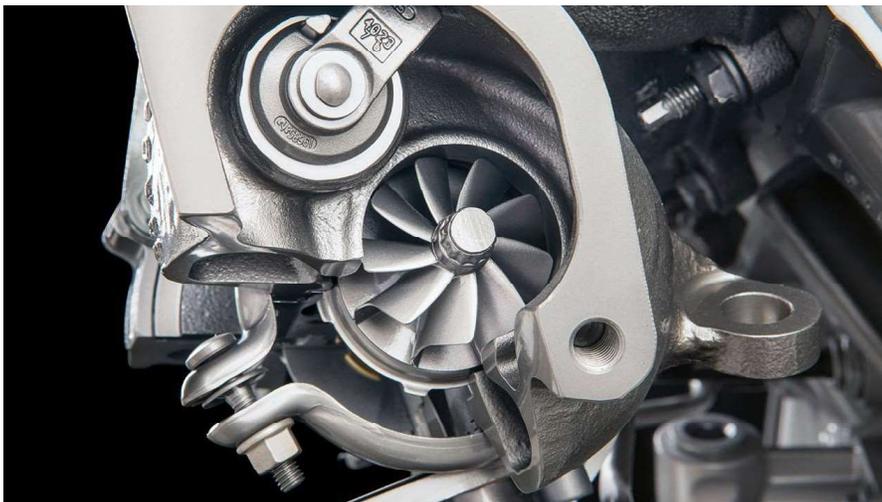
310/295  
horsepower  
@ 5,000 rpm

400/375  
lb.-ft. of torque  
@ 2,500 rpm

##### 3.5L EcoBoost V6 Economy-Rated (RWD only) (Late Availability)

300  
horsepower  
@ 3,750 rpm

425  
lb.-ft. of torque  
@ 3,250 rpm



#### TWIN TURBOCHARGERS

- Parallel dual/twin turbochargers
  - Work seamlessly with Ford-first electrically activated wastegates, enhancing operating efficiency
  - Utilize lightweight turbine wheels to help improve responsiveness
  - Made out of high-temperature super alloy Mar-M-247 developed by the aerospace industry

#### INTAKE AND EXHAUST

- Cast exhaust manifolds for heavy-duty operation and durability
- Intake and exhaust camshafts enhanced for improved operating efficiency and performance
- Intercooler reduces incoming air temperature

#### ECOBOOST DURABILITY TESTING

- Extensive durability tests ensure the 3.5L EcoBoost V6 engine can excel in all conditions

#### ENGINE TECHNOLOGIES

- Aggressive deceleration fuel shutoff (ADFSO)
- Auto Start-Stop
- Fail-Safe Engine Cooling System

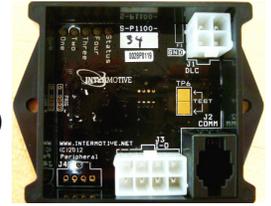
## AFIS507VSX-B Advanced Fast Idle System—Transit Application

2011-2016 Ford F250 - F550

2017-2019 Ford F250 - F550\*

2016-2017 Ford F650/F750

\*May Use the Ford 24-Pin "T" Gateway Harness (option B-AFIS507VSX-BP)



### System Operation

The Advanced Fast Idle System (AFIS) elevates engine idle speed in response to a number of triggers in order to assist electrical or mechanical systems on the vehicle.

### IMPORTANT—READ BEFORE INSTALLATION

It is the installer's responsibility to route and secure all wiring harnesses where they cannot be damaged by sharp objects, mechanical moving parts and high heat sources. Failure to do so could result in damage to the system or vehicle and create possible safety concerns for the operator and passengers. Avoid placing the module where it could encounter strong magnetic fields from high current cabling connected to motors, solenoids, etc. Avoid radio frequency energy from antennas or inverters next to the module. Avoid high voltage spikes in vehicle wiring by always using diode clamped relays when installing upfitter circuits.

### Installation Instructions

**Disconnect vehicle battery before proceeding with installation.**



**WARNING**  
Disconnect the battery to prevent setting a check engine light.

### AFIS507VSX Module

Remove the lower dash panel below the steering column area and find a suitable location to mount the module so that the Diagnostic LED's can be viewed with the lower dash panel removed. Secure using 2-sided foam tape, screws or wire ties. Locate the module in an area away from any high heat sources. Do not actually mount the module until all wire harnesses are routed and secure (last step of the installation is to mount the module).

### Data Link Harness Options

24 Pin Gateway "T" Connector	16 Pin OBDII "T" Connector	16 Pin OBDII Connector
B-AFIS507VSX-BP	A-AFIS507VSX-BP	A-AFIS507VSX-B B-AFIS507VSX-B

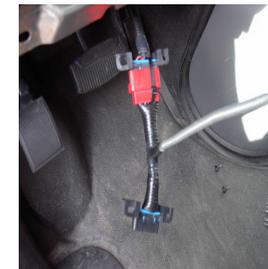
### **OBDII Data Link Harness (A-AFIS507VSX-B or B-AFIS507VSX-B)**

1. Locate the vehicle's OBDII Data Link Connector, mounted below the lower left dash panel.
2. Plug the Red connector from the AFIS Data Link Harness into the vehicle OBDII connector. Ensure the connection is fully seated and secured with the supplied wire tie.
3. Secure the AFIS Data Link harness so that it does not hang below the lower dash and plug the (4-pin connector) from the Data Link Harness into the 4-Pin connector on the AFIS module.



### **OBDII "T" Data Link Harness (A-AFIS507VSX-BP)**

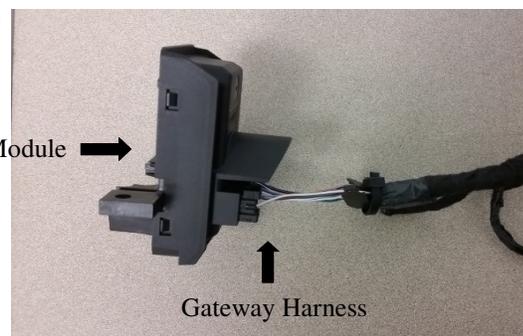
1. Locate the vehicle OBDII Data Link Connector, mounted below the lower left dash panel.
2. Remove the mounting screws for the OBDII connector. Plug the Red connector from the AFIS507VSX-B-P Data Link Harness into the vehicle's OBDII connector. Ensure the connection is fully seated and secure with the supplied wire tie.
3. Mount the Black pass through connector from the AFIS507VSX-B-P Data Link Harness in the former location of the vehicle's OBDII connector.
4. Secure the AFIS507VSX-B-P Data Link harness so that it does not hang below the lower dash and plug the 4-pin connector from the Data Link Harness into the 4-Pin connector on the AFIS507VSX-B module.



### **Ford 24-pin "T" Gateway Harness - 2017-2018 Ford F250 - F550 (B-AFIS507VSX-BP)**

1. Locate the vehicles Gateway Module. It will be mounted below the lower left dash panel.
2. Remove the harness behind the Gateway module by pressing the locking tab and pulling outward.
3. Plug the Female side of the Intermotive Gateway Harness into the back of the Gateway module. Ensure the connection is fully seated and secured by the locking tab.
4. Plug the Male side of the Intermotive Data Link Harness into the Gateway harness.
5. Secure the AFIS Gateway harness so that it does not hang below the lower dash panel.

Gateway Module →



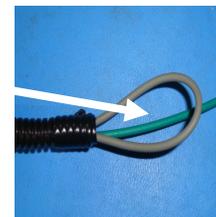
↑  
Gateway Harness

### **AFIS Harness (8-Pin Connector)**

#### **Fast Idle Engage Input, Green wire**

1. Attach the AFIS Harness connector Pin #8 Green wire to any equipment that provides a ground signal when the fast idle needs to be engaged. (PTO, pump, etc....)
2. Plug the 8-pin connector from the AFIS Harness into the 8-Pin connector on the module.

**Note:** The Green wire can also be connected to equipment providing a 12V signal, if programmed. See below for programming instructions.



#### **VBAT Low Fast Idle Trigger Disable, Black wire loop**

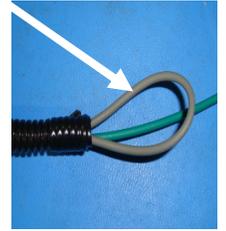
The system is configured from the factory for Fast Idle to be triggered when the battery voltage (VBAT) drops below 12.5V. If the VBAT Low Fast Idle Trigger is not desired, it can be disabled by cutting the Black wire loop on the 8-Pin connector between Pin #1 and Pin #3.



## Configurable Idle Speed, Gray wire

The AFIS507VSX-B allows the user to change the fast idle RPM during installation. The default speed is 1500 RPM gas / 1200 Diesel, but any speed between 900 RPM and 2000 RPM can be selected in 50 RPM increments.

1. To change the idle speed, locate the Gray wire in the harness which connects to the 8 pin Molex connector.
2. Pull this wire out of the loom to expose the bare copper end. Place the vehicle in Fast Idle by grounding the Manual Trigger Green wire.
3. With the engine in Fast Idle, momentarily grounding the Gray wire (RPM Configuration input) increases the idle speed by 50 RPM. When the idle speed reaches the maximum allowable speed for the particular engine, it will roll back around to 900 RPM. Wherever the user stops, this RPM becomes the new default Fast Idle speed, even through key cycles.
4. After the vehicle is set to the desired fast idle speed, insert the end of the Gray wire into the harness tubing and use tape to secure.



**Note:** Some vehicle PCM's will limit Fast Idle to less than 2000 RPM. Continue to momentarily ground the Gray wire and the RPM will eventually roll back around to 900 RPM. Do not leave the RPM's set in a range that the engine RPM is not responding to, as this may cause Fast Idle issues.

## Park Brake Fast Idle Trigger Enable/Disable

The AFIS507VSX-B is configured from the factory for Fast Idle **not** to be triggered when the Park Brake is applied. If the Park Brake Fast Idle trigger is desired, it may be enabled (or disabled) by the following procedure:

With key on, place the transmission in neutral, apply the Park Brake and press the Service Brake three times within 5 seconds.

Upon successful reprogramming, the on-board LEDs will briefly flash as a confirmation. Cycle the key for the change to take affect.

## A/C Fast Idle Trigger

The AFIS507VSX-B is configured from the factory for Fast Idle to be triggered when the A/C clutch is engaged and will stay engaged until the next key cycle, or a precondition is violated.

## Fast Idle Pin-8 Trigger, Active: Ground or 12V signal Enable/Disable

The module is configured from the factory for an active ground fast idle trigger. To change this to an active 12V trigger:

Turn the key on, place the transmission in neutral, apply the Service Brake, pull out on the Park Brake release and apply the Park Brake four times within 5 seconds.

Upon successful reprogramming, the LEDs will flash as a confirmation. Cycle the key for the change to take affect. Repeat to reverse back to a ground trigger.

**Leave in vehicle**  
**Operating Instructions AFIS507VSX-B Advanced Fast Idle System—Transit Application**  
**2011-2019 Ford F250 - F550**  
**2016-2017 Ford F650/F750**

**System Operation**

The AFIS507VSX-B Advanced Fast Idle System (AFIS) elevates engine idle speed in response to a number of triggers in order to assist electrical or mechanical systems on the vehicle.

Fast Idle may be initiated by either a manual trigger (Green wire being grounded), a low battery voltage (low VBAT) condition, the A/C clutch engaging, or if enabled, by setting the Park Brake.

Fast Idle will only occur when the required preconditions are met, as listed below. Fast Idle operation will be terminated by a loss of **any** of the preconditions, or removal of the trigger(s).

<b>Fast Idle Triggers</b>		
<b>Trigger Name</b>	<b>Trigger Conditions</b>	<b>Disable Conditions</b>
Manual Engage	Fast Idle Engage Green wire grounded <b>Or</b> 12V input enabled (based on setting)	Fast Idle Engage Green wire not grounded <b>Or</b> not 12V based on setting
VBAT Low	VBAT < 12.5V	Precondition Violation
Parking Brake	Parking Brake applied	Parking Brake Released
A/C Boost	A/C Clutch (engaged)	Precondition Violation

**Fast Idle Preconditions**

The following preconditions must be met prior to initiating Fast Idle operation:

- Vehicle speed zero
- Transmission in Park
- Accelerator pedal must not be applied
- Engine Coolant temperature must be less than 230°F
- Engine RPM must be greater than 200 and less than 2800.
- Service Brake not applied

**Factory Options** - The following are configurable at the factory for OEM customers. The default values are shown.

**AFIS507VSX-B**

Idle RPM: 1500 gas / 1200 Diesel

VBAT Low: 12.5V

A/C Trigger: Enabled

Parking Brake Trigger: Disabled

## Post Installation System Operation Test

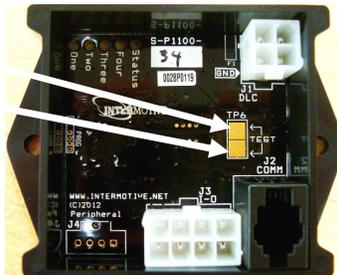
Perform the following tests before actually mounting the module, to allow easy viewing of the diagnostic LED's, if needed.

1. Place transmission in Park and start the engine. **NOTE:** Vehicle may enter Fast Idle if VBAT is low. Either wait to see if the battery charges and Fast Idle stops, or place a charger on the vehicle to disable the VBAT low trigger to allow testing of other triggers.
2. Manually engage Fast Idle by having aftermarket vehicle equipment ground the Green wire. Engine speed will increase to the set RPM level. If this does not occur, check harness connections. Also see diagnostics below.
3. When Fast Idle is engaged, keep the Green wire grounded, and depress the Service Brake for 1 second. Fast idle will temporarily disengage anytime the Service Brake is depressed, but will automatically reengage after approximately 2 seconds once the Brake pedal is released.
4. Place transmission shift lever in the "Neutral" position. (Green wire still grounded). Verify the system does not activate Fast Idle.

If the AFIS507VSX-B fails any of the above tests, check harnesses and review instructions, or check diagnostics below. If necessary, call InterMotive Technical Support at (530) 823-1048.

## Diagnostics

Diagnostic mode is entered by momentarily shorting the two gold "Test" pads together on the module. The module provides diagnostic LEDs which illuminate according to the following table. To exit this mode, cycle the key or momentarily ground the "Test" pad again.



## Fast Idle Status Codes

Status Codes provide the current status of the Fast Idle system. The on-board "Status" LED will flash a 2-digit code as shown in the table. The first digit will flash, wait half a second, flash the second digit, then wait one second before the next code. The Status Codes continue to flash until the module is reset (cycle key), or the test input is momentarily grounded again.

LED #	Diagnostic Mode LED Descriptions
1	On when fast idle is engaged
2	On when Green trigger wire is active
3	On when Gray RPM set wire is grounded
4	On when the Parking Brake is applied with the parking brake trigger enabled
STATUS	Continuously flashes two digit status codes. See Status Code table

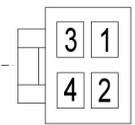
AFIS Status Codes	
Status Code	Description
1-1	Ready for fast idle
2-3	Triggered: Parking Brake
2-4	Triggered: VBAT Low
2-5	Triggered: A/C Boost
2-8	Triggered: Manual Input
3-1	RPM > 2800
3-2	RPM < 200
3-3	TR not = to PARK
3-4	VSS not = to 0 MPH
3-5	Service Brake applied
3-7	Unsafe; Need to cycle TR
3-8	ECT > 230°F

## Module Mounting

Ensure all harnesses are properly connected and routed, and are not hanging below the dash area. Mount the AFIS507VSX-B module using screws or double sided tape. Reinstall the lower dash panel.

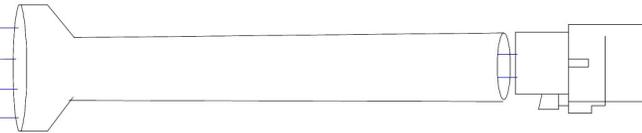
AFIS507VSX-B Data Link Harness

Part # S-H35AX



Back of Connector

- 1 — RED — (Battery Voltage)
- 2 — YELLOW — (CAN High Speed/High)
- 3 — GRAY — (Ground)
- 4 — BROWN — (CAN High Speed/Low)

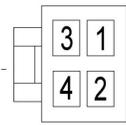


Data Link Harness-  
Attach To OEM OBDII  
Connector

Optional AFIS507VSXP-B Data Link Harness

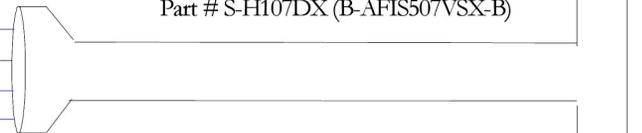
Part # S-H07DX

Part # S-H107DX (B-AFIS507VSX-B)

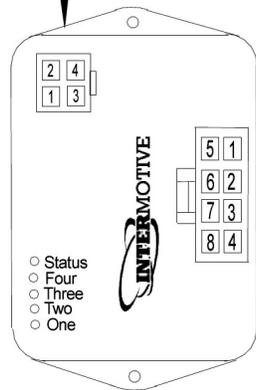


Back of Connector

- 1 — RED — (Battery Voltage)
- 2 — YELLOW — (CAN High Speed/High)
- 3 — GRAY — (Ground)
- 4 — BROWN — (CAN High Speed/Low)

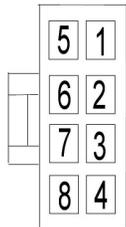


Pass Through OBDII  
Connector



AFIS 507VSX-B  
Part # S-M1100-37

Harness Part # S-H38AX



Back of Connector

- 1 — BLACK — VBAT Low Trigger
- 2 — N/C
- 3 — BLACK — VBAT Low Trigger
- 4 — GRAY — RPM Configuration (ground input)
- 5 — N/C
- 6 — N/C
- 7 — N/C
- 8 — GREEN — Fast Idle Engage Input 1 (active ground input)(default)

**Submit product registration at [www.intermotive.net](http://www.intermotive.net)**

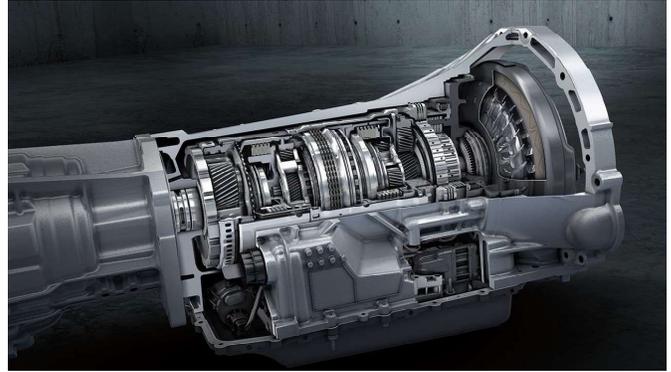
If the AFIS507VSX-B fails any step in the Post Installation Test, review the installation instructions and check all connections.

If necessary call InterMotive Technical Support at (530) 823-1048.

## 2021 Transit > Performance and Capability

### 10-Speed Automatic with Selectable Drive Modes

- This transmission is paired with all Transit engines
- Three overdrive gears and a wide 7.4:1 gear ratio span
- Integrated torque converter/turbine clutch helps reduce weight, while also reducing the packaging size of the transmission
- High-speed, one-way clutch helps deliver smooth and responsive shifting
- Engine rpm matching on coast-down shifts provides a seamless transition to lower gears — effective when cornering
- Integrated electric pump works with Auto Start-Stop Technology for seamless restarts
- Ultra-low viscosity transmission fluid and off-axis variable-displacement pump maximize transmission performance
- Utilizes real-time adaptive shift schedule algorithms which monitor more than a dozen powertrain- and driver-control signals to help ensure the transmission is in the right gear at the right time
- Progressive Range Select



#### DRIVE MODES

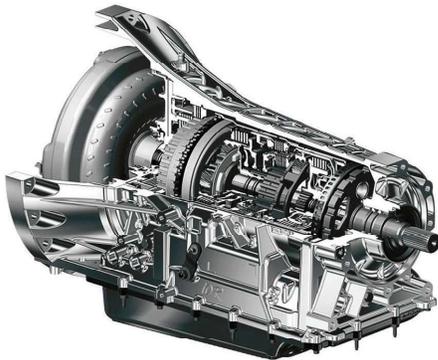
Drive modes change the performance of electronic stability control, traction control, engine throttle response, transmission shifting and steering feel. Select the desired mode using the button on the instrument panel.

- Normal — Balanced combination of comfort and handling for everyday driving
- ECO — Helps deliver enhanced fuel efficiency with trade-offs in performance and comfort
- Slippery — Designed for driving in slippery conditions
- Tow/Haul — Improves transmission operation with trailers and heavy loads, especially over steep grades
- Mud/Ruts — Ideal for muddy or rutted surfaces, such as a rain-soaked job site (All-Wheel Drive only)



#### MAKE THE POINT: SMART SHIFT LOGIC

Customers may notice that a Transit with the 10-speed transmission does not always shift sequentially. For example, the indicator gauge may change from displaying 1st to displaying 3rd. This is because of the smart shift logic with real-time-adaptive shift-scheduling algorithms which monitor more than a dozen powertrain-control and driver-control signals to ensure the right gear at the right time.



**NOTE:** For availability of product features, please see Availability by Model and/or the [Dealer Ordering Guide](#).

# 2021 TRANSIT PASSENGER VAN

Full-Size Vans Class<sup>1</sup>

Models: Transit-150 XL, Transit-150 XLT,  
Transit-350 XL, Transit-350 XLT,  
Transit-350 HD XL,  
Transit-350 HD XLT



Transit-350 XLT LR Regular Passenger Van. Kapoor Red. Available equipment.



Cargo and load capacity limited by weight and weight distribution.

## STANDARD FEATURES

2 USB ports in 1st row	FordPass™ Connect <sup>2</sup> with 4G LTE Wi-Fi hotspot capability (enables FordPass App <sup>2</sup> features when activated)
Up to 4 additional USB ports behind 1st row (1 in each row; depending on seating configuration)	Halogen headlamps
12V powerpoints (2)	Heavy-duty front axle
AdvanceTrac® with RSC® (Roll Stability Control™) with Side-Wind Stabilization	Mirrors – Power, power-folding, short-arm sideview
Airbags – Driver and front-passenger front, front-seat side and Safety Canopy® System with side-curtain airbags	Remote Keyless Entry System
Alternator – 250-amp	SOS Post-Crash Alert System™
Cruise control (XLT)	Tilt/telescoping steering column
Door – Sliding passenger-side	Tire Pressure Monitoring System (TPMS; excludes spare)
Engine – 3.5L PFDi V6	Transmission – 10-speed SelectShift® automatic with overdrive

## FORD CO-PILOT360™ TECHNOLOGY

### STANDARD FEATURES:

Auto High-Beam Headlamps	Post-Collision Braking
Autolamp (Automatic On/Off Headlamps) (XLT)	Pre-Collision Assist with Automatic Emergency Braking (AEB)
BLIS® (Blind Spot Information System) with Cross-Traffic Alert and Trailer Coverage (XLT)	Rain-Sensing Windshield Wipers
Forward Collision Warning	Rear View Camera with Trailer Hitch Assist
Hill Start Assist	Reverse Sensing System (XLT)
Lane-Keeping System	Side Sensing System (XLT)

## AVAILABLE FEATURES

3 lengths: Regular, Long and Extended-Length	Programmable battery guard/enhanced cutoff relay
3 roof heights: LR, MR and HR <sup>3</sup>	Upfitter interface module
Adaptive Cruise Control	Vehicle maintenance monitor
Adjustable Speed Limiting Device (ASLD)	Reverse Sensing System (XL)
All-Wheel Drive (AWD)	SYNC® 3 with 6.5" LCD capacitive touchscreen with AppLink®, 911 Assist® and 2 smart-charging USB ports
Alternator – Dual	Trailer wiring provisions
Autolamp (Automatic On/Off Headlamps) (XL)	<b>FLEET EXCLUSIVES</b>
BLIS (Blind Spot Information System) with Cross-Traffic Alert and Trailer Coverage (XL)	Daytime running lamps
Doors – 60/40 swing-out passenger-side (LR)	Decal (up to 15-, 25-, 45-, 70- or 95-sq.-ft.)
Doors – Power-sliding side (MR, HR)	Smart Acceleration Truncation
DRW (dual rear wheels)	Speed limitation (65-, 70- or 75-mph governed top speed options)
Engine – 3.5L EcoBoost® V6 with Auto Start-Stop Technology	
Engine hour meter	
Extended-range fuel tank (31 gallons; Long and Extended-Length)	

<sup>1</sup>Based on Ford segmentation. <sup>2</sup>FordPass Connect, the FordPass App, and complimentary Connected Service are required for remote features (see FordPass Terms for details). Connected service and features depend on compatible AT&T network availability. Evolving technology/cellular networks/vehicle capability may limit functionality and prevent operation of connected features. Connected service excludes Wi-Fi hotspot. FordPass App is available via download and compatible with select smartphone platforms. Message and data rates may apply. <sup>3</sup>HR not available on Transit-150. <sup>4</sup>Available on select series. Restrictions may apply. See your dealer for details. <sup>5</sup>Fleet only. <sup>6</sup>New for 2021. <sup>7</sup>Visit fleet.ford.com for complete package content. <sup>8</sup>Maximum capabilities shown are for properly configured vehicles with required equipment. For additional information, see your dealer.

## EXTERIOR COLORS<sup>4</sup>



## INTERIOR COLORS<sup>4</sup>



\*Metallic.

## AVAILABLE PACKAGES<sup>7</sup>

Auxiliary Heater/AC Prep Package (62C)

Auxiliary Heater Prep Package (62A)

Builder's Prep Package (47E)

Exterior Upgrade Package (standard on XLT) (18D/18L)

Heavy-Duty Trailer Tow Package (53B)

Livery Package (47L)

Modified Vehicle Wiring System (53K)

Upfitter Package (67C)

## DIMENSIONS & CAPACITIES

Roof Type	Wheelbase (in.)	Overall Height (in.)	Overall Length (in.)	Seating
<b>Low Roof (LR)</b>				
Transit-150	129.9	82.2	219.9	2/8/10
Transit-350	147.6	82.9	237.6	2/12/14/15
<b>Medium Roof (MR)</b>				
Transit-150	129.9	98.7	217.8	2/5/8/10
Transit-350	147.6	99.8	235.5	2/8/12/14/15
<b>High Roof (HR)</b>				
Transit-350	147.6	109.6	235.5	2/8/12/14/15
Transit-350 HD Extended-Length (DRW)	147.6	109.4	263.9	2/10/14/15

## CAPABILITIES<sup>8</sup> (lbs.)

	Max. GVWR
Transit-150 LR/MR	8,550
Transit-350 LR	9,550
Transit-350 MR/HR	9,550
Transit-350 HD HR Extended-Length (DRW)	10,360

## ENGINES

	3.5L PFDi V6	3.5L EcoBoost V6 with Auto Start-Stop Technology
Horsepower (hp @ rpm)	275 @ 6,500	310 @ 5,000
Torque (lb.-ft. @ rpm)	262 @ 3,750	400 @ 2,500

RUSFRE  
604 McGEACHIE DRIVE  
MILTON, ONTARIO, L9T 3Y5

**PRODUCT: 1020F-1, 1020F-2.5, 1020F-16, 1020F-55 UNDERCOATING**

**Section 01: Chemical product and company identification**

Product name..... 1020F-1, 1020F-2.5, 1020F-16, 1020F-55 UNDERCOATING  
 Manufactured for..... RUSFRE  
 604 McGeachie Drive  
 Milton  
 Ontario  
 L9T 3Y5  
 24 hour emergency number..... IN CANADA CALL CANUTEC (613) 996-6666-IN THE UNITED STATES CALL  
 CHEMTREC (800) 424-9300.  
 Material use..... Rust proofing. This product should not be used for any other purpose other than the ones  
 described in this section.  
 Chemical family..... Mixture.  
 Preparation date..... April 21, 2015.  
 Hazard rate  
 NFPA rating..... Health: 2 Fire: 2 Reactivity: 0.  
 HMIS..... H: 2\* F: 2 R: 0.

**Section 02: Hazards identification**



Signal Word..... DANGER.  
 Hazard Classification..... Skin Irritant 2. Flammable Liquid 3. Eye Irritant 2. Mutagen 1B. Reproductive 2. STOT SE 1. Carcinogen 1B. STOT RE 1.  
 Hazard Description..... H226 Flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H340 This product contains ingredients that may cause genetic defects. H350 This product contains ingredients that may cause cancer. H361 This product contains ingredients that are suspected of damaging fertility or the unborn child. H370 Causes damage to the liver and kidneys. H372 Causes damage to the liver and kidneys through prolonged or repeated exposure.  
 Precautionary Statements..... P201 Obtain special instructions before use. P202 Do not handle this product until all safety instructions have been read and understood. P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion proof equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P260 Do not breathe mist, vapours, or spray. P264 Wash hands thoroughly after handling. P270 Do not eat drink or smoke while using this product. P280 Wear protective gloves and eye protection.  
 Response ..... P303 + P361 + P353 If on skin or in hair: take off all contaminated clothing immediately. Rinse thoroughly with water and use safety shower. P321 - Consult with a doctor or poison control centre if skin is itchy or a skin rash develops or you feel unwell. P305 + P351 + P338 If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing until medical help arrives. P337 + P313 - If eye irritation persists get medical attention. P314 - Get medical advice/attention if you feel unwell. P362 + P364 - Take off contaminated clothing and wash before reuse. P370 + P378 In case of fire - use dry chemical powder, CO2 or 6% foam.  
 Storage..... P405 Store locked up. P403 + P235 Store in well ventilated area. Keep cool.  
 Disposal..... P501 Dispose all unused, waste or empty containers in accordance with local regulations.

**Section 03: COMPOSITION/INFORMATION ON INGREDIENTS**

Hazardous Ingredients	CAS #	Wt. %
ASPHALT	8052-42-4	75-80
MINERAL SPIRITS	8052-41-3	10-15
METHANOL	67-56-1	0.1-1.0
BENZENE	71-43-2	0.1-1.0

**PRODUCT: 1020F-1, 1020F-2.5, 1020F-16, 1020F-55 UNDERCOATING****Section 03: COMPOSITION/INFORMATION ON INGREDIENTS**

SBS RUBBER

Not toxic

2

**Section 04: First aid measures**

Eye contact.....	In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at least 15 minutes. Obtain medical attention.
Skin contact.....	Remove all contaminated clothing and immediately wash the exposed areas with copious amounts of water for a minimum of 30 minutes or up to 60 minutes for critical body areas. If irritation persists, seek medical attention.
Inhalation.....	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen, obtain medical attention.
Ingestion.....	Do not induce vomiting. If ingestion is suspected, contact physician or poison control center immediately. If spontaneous vomiting occurs have victim lean forward with head down to prevent aspiration of fluid into the lungs. Never give anything by mouth to an unconscious person.
Additional information.....	Treat victims symptomatically. The main hazard from ingestion is aspiration of the liquid into the lungs. In the event of an incident involving this product ensure that medical authorities are provided a copy of this safety data sheet.

**Section 05: Fire fighting measures**

Extinguishing media.....	"Alcohol" foam, CO <sub>2</sub> , dry chemical. In cases of larger fires, water spray should be used.
Hazardous combustion products.....	Oxides of carbon (CO, CO <sub>2</sub> ).
Special fire fighting procedures.....	Firefighter should be equipped with self-contained breathing apparatus and full protective clothing to protect against potentially toxic and irritating fumes. Cool fire-exposed containers with cold water spray. Heat will cause pressure buildup and may cause explosive rupture. Keep run-off water from entering sewers and other waterways. Dike for water control.

**Section 06: Accidental release measures**

Leak/spill.....	Ventilate. Eliminate all sources of ignition. Contain the spill. Avoid all personal contact. Spilled material and water rinses are classified as chemical waste, and must be disposed of in accordance with current local, provincial, state, and federal regulations. Evacuate all non-essential personnel. Prevent runoff into drains, sewers, and other waterways. Absorb with earth, sand, or another dry inert material. Shovel into suitable unsealed containers, transport to well-ventilated area (outside) and treat with neutralizing solution: mixture of water (80%) with non-ionic surfactant Tergitol TMN-10 (20%); or water (90%), concentrated ammonia (3-8%) and detergent (2%).
-----------------	---

**Section 07: Handling and storage**

Handling procedures.....	Avoid all skin contact and ventilate adequately, otherwise wear an appropriate breathing apparatus. Always adopt precautionary measures against build-up of static which may arise from appliances, handling and the containers in which product is packed. Avoid breathing vapours or mist. Ground handling equipment. Handle and open container with care. Employees should wash hands and face before eating or drinking. Keep away from heat, sparks, and open flame.
Storage needs.....	Keep away from heat, sparks, and open flames. Keep container closed when not in use. Store away from oxidizing and reducing materials. Store away from sunlight.

**Section 08: Exposure controls / personal protection**

Ingredients	ACGIH TLV		PEL	OSHA PEL		NIOSH
	TWA	STEL		PEL	STEL	
ASPHALT	0.5 mg/cu m (Inhalable fraction) 8hr	Not established	Not established	Not established	Not established	5 mg/m <sup>3</sup> 15 minutes
MINERAL SPIRITS	525 mg/m <sup>3</sup>	No data				
METHANOL	200 ppm	250 ppm skin	200 ppm	Not established	Not established	200 ppm / STEL 250 ppm
BENZENE	0.5 ppm skin	2.5 ppm skin	1 ppm	5 ppm	5 ppm	0.1 ppm
SBS RUBBER	Not established	Not established	Not established	Not established	Not established	Not established
Eye/type.....	Liquid chemical goggles.					
Respiratory/type.....	Local exhaust ventilation is recommended. Wear an appropriate, properly fitted respirator when contaminant levels exceed the recommended exposure limits.					
Gloves/ type.....	Chemical resistant gloves.					
Clothing/type.....	Wear adequate protective clothes.					

**PRODUCT: 1020F-1, 1020F-2.5, 1020F-16, 1020F-55 UNDERCOATING****Section 08: Exposure controls / personal protection**

Footwear/type..... Safety boots per local regulations.  
 Other/type..... Emergency showers and eye wash stations should be available.  
 Ventilation requirements..... Local exhaust at points of emission.

**Section 09: Physical and chemical properties**

Physical state..... Liquid.  
 Colour..... Black.  
 Odour..... Aromatic petroleum odour.  
 Odour threshold (ppm)..... 0.2 ppm.  
 Vapour pressure (mm Hg)..... No data.  
 Vapour density (air=1)..... 4.7.  
 pH..... No data.  
 Density..... 8.2 lb/usg - 0.98 g/mL.  
 Freezing point (deg C)..... No data.  
 Solubility..... No data.  
 Boiling point (deg C)..... 154-196°C .  
 Evaporation rate..... 0.12 (n-Butyl Acetate = 1).  
 Flash point (deg C), method..... 40°C Closed cup.  
 Auto ignition temperature (deg C)..... 210°C .  
 Upper flammable limit (% vol)..... 5.0.  
 Lower flammable limit (% vol)..... 0.8.  
 Coefficient of water/oil distribution..... No data.  
 VOC..... 2.87 lb/usg - 343.9 g/L.  
 Decomposition temperature..... No data.  
 Viscosity..... 4000-5000 cps.

**Section 10: Stability and reactivity**

Stability..... Stable at normal temperatures and pressures.  
 Reactivity conditions..... Avoid heat, sparks and flames. Explosive reactions can occur in the presence of strong oxidizing agents.  
 Incompatibility..... Keep away from heat. Incompatible with strong oxidizers.  
 Hazardous products of decomposition..... By fire: Dense black smoke. Oxides of carbon (CO,CO2).  
 Hazardous polymerization..... Hazardous polymerization will not occur.

**Section 11: Toxicological information**

Ingredients	LC50	LD50
ASPHALT	>94.4 mg/cu m 4.5hr rat	>5000 mg/kg rat oral >2000 mg/kg rabbit dermal
MINERAL SPIRITS	No data	No data
METHANOL	128.2 mg/L, 4h rat	5,628 mg/kg rat oral 15,800 mg/kg rabbit dermal
BENZENE	10,000 ppm 7 hours rat	3306 mg/kg rat oral >8260 mg/kg dermal rabbit
SBS RUBBER	No data	No data
Route of entry .....	Eye contact. Skin contact. Inhalation.	
Effects of acute exposure.....	Hazardous in contact with skin, by ingestion, and by inhalation. Excessive vapours may cause nasal and respiratory tract irritation. Irritating to eyes, skin and respiratory system. May cause central nervous system effects such as headache, nausea, vomiting and weakness.	
Effects of chronic exposure.....	Breathing high concentrations of vapour may cause anesthetic effects and serious health effects. Chronic exposure to organic solvents may cause permanent brain and nervous system damage. Possible damage to liver and kidneys. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal .	
Carcinogenicity of material.....	Benzene is known to the state of California to cause cancer and developmental effects.	
Reproductive effects.....	Methanol is listed on California's Proposition 65 as causing developmental toxicity.	

**Section 12: Ecological information**

Environmental..... Do not allow to enter waters, waste water or soil.  
 Biodegradability..... No data.

**PRODUCT: 1020F-1, 1020F-2.5, 1020F-16, 1020F-55 UNDERCOATING****Section 13: Disposal considerations**

Waste disposal..... Dispose of as an industrial waste in a manner acceptable to good waste management practice and in accordance with applicable local, provincial/State or federal regulations. Dispose of waste in accordance with all applicable Federal, Provincial/State and local regulations.

**Section 14: Transport information**

TDG Classification..... UN1999 - Tars, Liquid - Class 3 - Packing Group III - This product meets limited quantity exemption when shipped in containers less than 5 Litres.  
 DOT Classification (Road)..... UN1999 - Tars, Liquid - Class 3 - Packing Group III - Ltd Qty (5 Liters/1.3 Gallons).  
 IATA Classification (Air)..... UN1999 - Tars, liquid - Class 3 - Packing Group III .  
 IMDG Classification (Marine)..... UN1999 - Tars, Liquid - Class 3 - Packing Group III - EmS: F-E S-E.  
 Marine Pollutant..... Potential marine pollutant.  
 Proof of Classification..... In accordance with Part 2.2.1 of the Transportation of Dangerous Goods Regulations (July 2, 2014) - we certify that classification of this product is correct. .

**Section 15: Regulatory information**

CEPA status..... On Domestic Substances List (DSL).  
 OSHA..... This product is considered hazardous under the OSHA Hazard Communication Standard.  
 SARA Title III  
 Section 302 - extremely hazardous ..... None.  
 substances  
 Section 311/312 - hazard categories..... Immediate health, delayed health, fire hazard.  
 Section 313..... Methanol. Benzene.  
 EPA hazardous air pollutants (HAPS) ..... Methanol.  
 40CFR63  
 TSCA inventory status..... All components are listed.  
 California Proposition 65..... This product contains Methanol known to the State of California to cause developmental reproductive toxicity. Benzene is known by the State of California to cause cancer.

**Section 16: Other information**

Prepared by: ..... REGULATORY AFFAIRS.  
 Telephone number:..... (800) 387-7981.  
 Disclaimer:..... DISCLAIMER: All information appearing herein is based upon data obtained from experience and recognized technical sources. To the best of our knowledge, it is believed to be correct as of the date of issue but we make no representations as to its accuracy or sufficiency and do not suggest or guarantee that any hazards listed herein are the only ones which exist. The hazard information contained herein is offered solely for the consideration of the user, subject to his own investigation and verification of compliance with applicable regulations, including the safe use of the product under every foreseeable condition. The information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.  
 Preparation date: ..... Apr21/15



SERVING THE BUS TRANSPORTATION INDUSTRY  
4121 Eastland Dr  
Elkhart, IN 46516  
Phone: 574-522-5000; FAX: 574-522-9099

## *Care and Keeping of the A&M Systems Door Actuator System*

### Six-month Actuator Maintenance Schedule

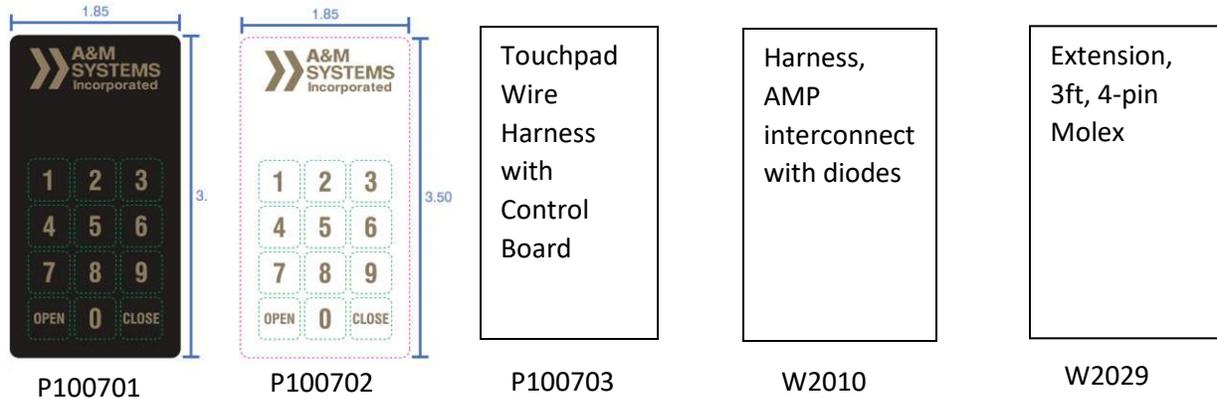
1. Lubricate the main gears with white lithium aerosol grease at time of installation of the door system and each 6 month interval.
2. Lubricate all other moving parts with white lithium grease.
3. Inspect the open limit switch actuating tab for proper adjustment. Ensure that it is limiting the operator from driving the doors past 90° open position. Ensure that there is a gap between the bolt assembly on the gears and the gear stabilizer. Adjust as required, see DOC00007 Electric Rigging Instructions.
4. Inspect the operation of the current sensing system built into the motor control board. The red LED must illuminate when the door reaches the fully closed position.
5. Test the Auto Reopen (if equipped). Place a solid non-marring object approximately 12" across in the door travel and close the door. The door should reopen after making contact with the object. Inspect for adjustment and repair/replace as necessary.
6. Inspect for bent push-pull rods; replace as necessary.
7. Inspect entire system for lost motion and worn mechanical components. Replace or adjust as required.
8. Inspect the entire system for loose fasteners or components. Repair as required. See DOC00112 Service Bulletin 3-8-17
9. Inspect for tightness of the set screws binding the actuator arms to the door leaf drive hex. Tighten or replace as needed.
10. Inspect manual release lever for proper operation. Lubricate the shaft running through the center of the body with white lithium grease.
11. With manual release lever pulled inspect doors for smooth unobstructed operation by hand. Repair/Lubricate as necessary.
12. Inspect motor and gears for missing, cracked, and/or broken teeth.
13. Inspect actuator arms for bent or cracked parts. Replace as necessary.
14. Check circuit board operation. See DOC00033 - Quick-Check PC Board Troubleshooting Guide
15. Inspect for frayed, broken, and/or pinched wires. Replace as required.

### Six-month Door Leaf Maintenance Schedule

1. Inspect all door frame mechanical joints for looseness. Tighten as required.
2. Inspect Torque Arm attaching rivets for looseness. Replace as required.
3. Inspect Torque Arm shaft for twisting or distortion. Replace as required.
4. Inspect lower door hinge pivot for any defects and repair or replace as required.
5. Inspect door assembly bolts for corrosion. Replace as necessary.
6. Inspect lower pivot mounting bolts for corrosion and replace as necessary.
7. Inspect door leaf center overlap seal for damage. Clean only with a mild detergent.

For additional detail information please visit our website at: [www.anmsystems.com](http://www.anmsystems.com)

# Touchpad Installation and Programming Instructions

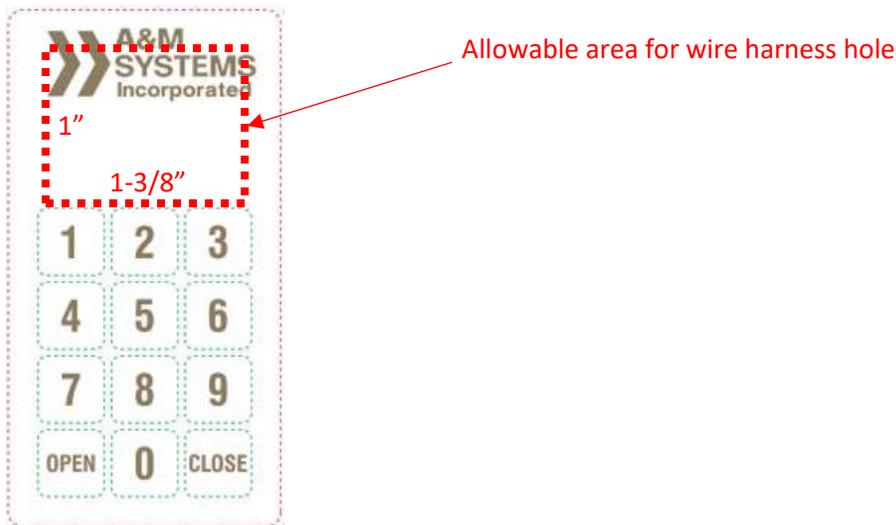


## General Information

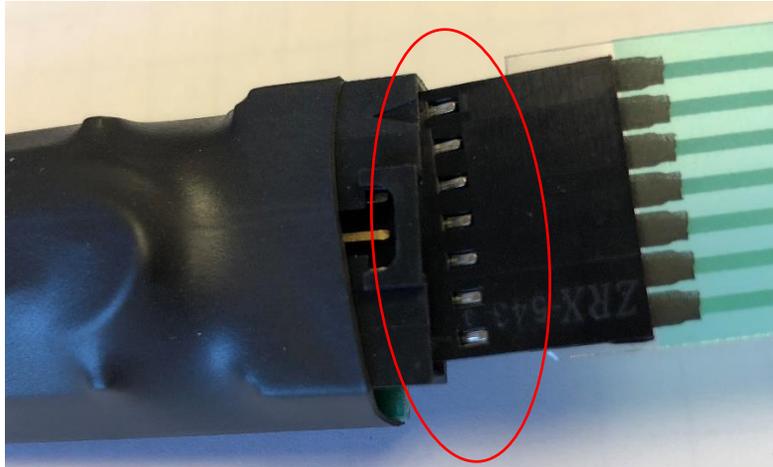
The adhesive used in these touchpads is 3M 9500PC PET adhesive. This is ideal for bonding metals, glass, and plastics both coated or non-coated and has good chemical resistance. Adhesion to wood or other porous materials is not recommended.

Touchpads are available in black or white, each with gold lettering. See above for valid part numbers.

Touchpads must be mounted on a clean, oil-free, smooth, burr free solid surface. A hole or slot of at least 7/8" should be located in such a way that is covered completely by the top of the touchpad and at least 1/4" of adhesive is between the hole and the outside of the touchpad.



Careful consideration should be taken when feeding the ribbon cable through to hole in the vehicle. Best installation practice would be to not allow the ribbon cable to come into contact with the edge of the hole. If fretting is a concern, reinforce the cable with nylon-reinforced tape to avoid damage to the ribbon cable. When connecting the ribbon cable to the controller harness, press firmly. If disconnection is a concern, tape the connection together to avoid disconnection in the wall. The ribbon cable is able to be plugged-in upside down. Doing so will change the button presses and it will not function correctly. Use the diagram below to be sure the ribbon cable is plugged-in correctly.



The touchpad will still function if the ribbon cable is plugged-in upside-down but the inputs will be wrong. For instance, the code 4-1-2-1 will turn into “Close”-9-8-9 with the “4” button acting as the “Close” button and “6” acting as the “Open” button. A chart of the labeled buttons vs actual inputs is located at the end of this document. If this occurs, remove the ribbon cable and insert it right-side up as shown above and all will be well.

Route the harness in such a way to avoid sharp corners and other areas that would cause fretting of the insulation and potential failure. Use the provided double-sided tape and adhere the control box to a solid surface somewhere where it will be accessible when needed but out of the way of any other parts that might be affected by it or that could affect its performance. The mounting surface should be clean, oil-free and smooth to provide the best adhesion. Insert coach 4-pin wire harness into female 4-pin plug on touchpad harness P100703. Plug male 4-pin connector from wire harness P100703 into A&M Systems PC Control Board.

**NOTE:** This device will back feed 12v +DC through the input signal. If this is not desired, use wire harness W2010 to eliminate the back feed. If your signal wires are grounded in the normal state, W2010 is also required.

## ***Programming***

**The factory default code is 4-1-2-1.**

By default, the touchpad is in a locked state. A code is entered to unlock the “Open” and “Close” functions. Once unlocked, if no key is pressed for 10 seconds, the touchpad will revert to a locked state and the programmed code will need to be re-entered.

### ***Programming the Unlock Code***

While the factory default code is set as 4-1-2-1, it is recommended that this be changed.

In order to do so, enter the following:

- 1) Enter the current programmed code (default code is 4-2-1-1) on the touchpad to place it in an unlocked state.
- 2) Enter 5-6-7-8 to enter the code reprogramming stage.
- 3) Enter your new 4-digit code. Only the last 4 numbers pressed will be recorded. Press Open when done.
- 4) Re-enter the same 4-digit code remembering that only the last 4 digits will be recorded. Press Close to confirm and save the code. Note: The new 4-digit code will only save with both codes entered are identical. If the codes are not identical, the previously programmed unlock code will remain in effect.
- 5) The touchpad will immediately go back to the locked state. Unlock it by entering the new code or if an error was made, the previous programmed code.

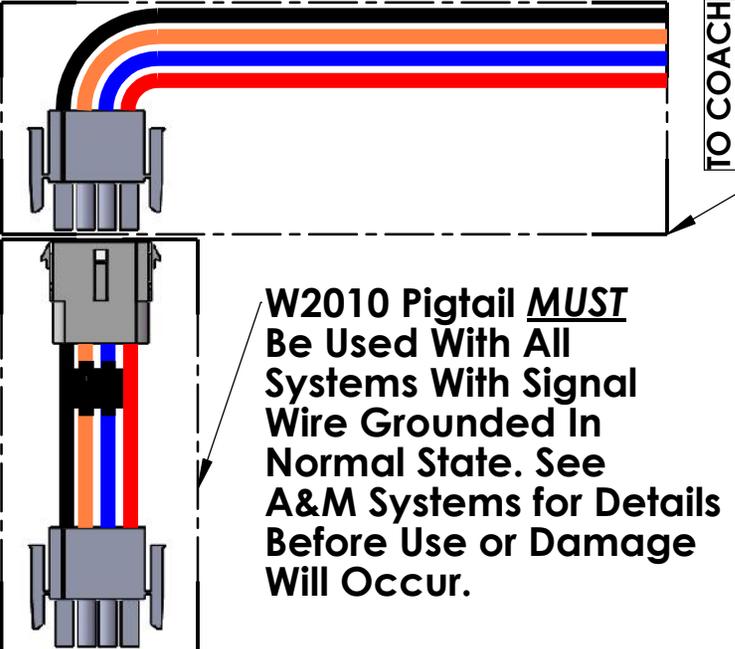
If the programmed code is not known or a new one desired:

- 6) Press and hold the button located on the top of the control box, attached to the interior wire harness by using a dull, non-metallic object for 5 seconds.
- 7) The code is now reverted to the default code of 4-1-2-1.
- 8) If a new code is desired, follow the above directions 1-5 above.

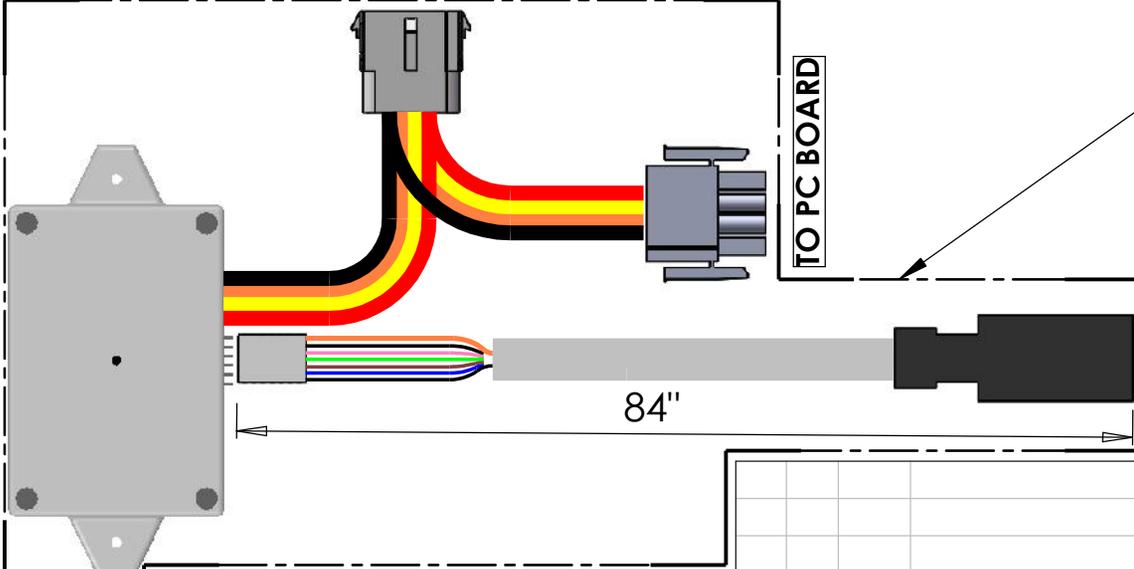
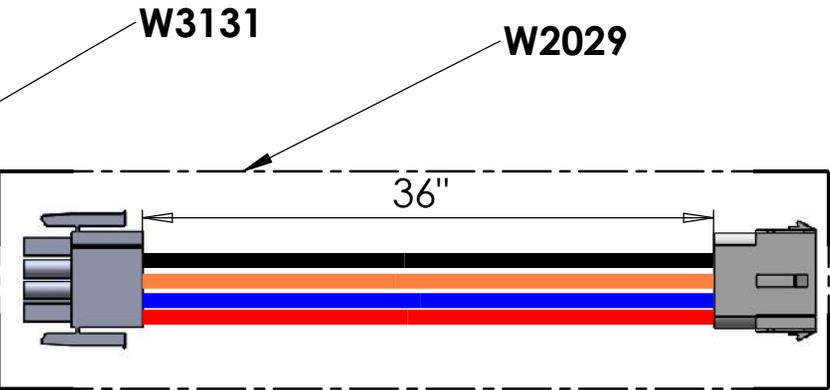
For troubleshooting only. Use this table as a reference if touchpad is plugged-in incorrectly.

Touchpad Button Label	Actual Input
1	9
2	8
3	7
4	Close
5	0
6	Open
7	3
8	2
9	1
0	5
Open	6
Close	4

DRAWING NOT TO SCALE



**W2010 Pigtail MUST Be Used With All Systems With Signal Wire Grounded In Normal State. See A&M Systems for Details Before Use or Damage Will Occur.**



**P100703, Wire Harness and Control Board**

**P100701, Touchpad Black  
P100702, Touchpad White**



NEXT ASSY.:  
SUPERSEDES:  
DO NOT SCALE DRAWING  
DRAWING NOT TO SCALE

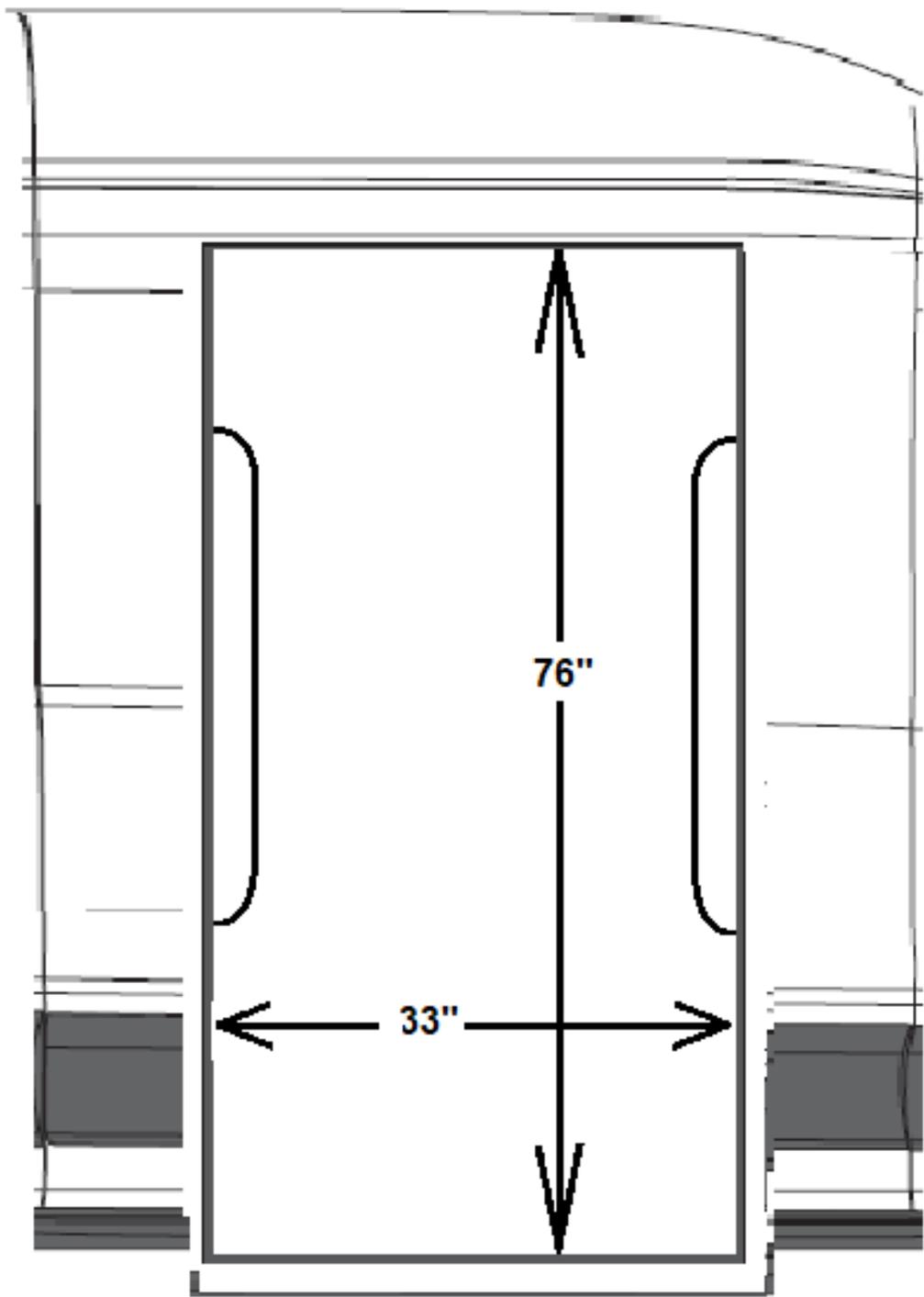
*THIS DRAWING IS THE PROPERTY OF A&M SYSTEMS, INC. AND IS NOT TO BE DUPLICATED OR USED IN ANY WAY DETRIMENTAL TO THEIR BEST INTEREST.*

REV.	BY	DATE	DESCRIPTION
TOLERANCE UNLESS SPECIFIED			DRAWING INFORMATION
Fractions: +/- 1/32			DRAWN: bmilller CKD:
Decimals: .000 +/- .005			DATE: 11/8/17 SIZE: A
Angles: +/- 1 Deg.			SCALE: 1:2 WT.:

TITLE  
DOC00154, Touchpad Wiring, Flexible with Control Board  
MAT'L SPEC.

PART NUMBER \_\_\_\_\_ PAGE 1 OF 1

RELEASE TO PRODUCTION



## WARRANTY

LIGHTHOUSE INTERNATIONAL LTD. warrants the Warm Welcome® low voltage step heaters to the original purchaser against defects in workmanship and materials when used under normal operating conditions for a period of three years from the date of purchase. Lighthouse's obligation under this warranty is limited to repair of the Warm Welcome® step heater. Cost of removal and installation is not included. If failure should occur, return the worn out or defective step heater with a dated proof of purchase to Lighthouse International Ltd., for verification and repair or replacement under this warranty. Lighthouse International Ltd. shall replace the defective heater within 90 days after the defect is verified. This remedy does not apply to any defect arising out of abnormal use, negligence, alteration of the steps, or improper installation. Lighthouse makes no other representations or express warranties except those contained herein. Any implied warranties granted under state law, including warranties of merchantability and fitness for a particular purpose, are limited in duration to the express warranty granted hereunder. Lighthouse in no event shall be liable for direct, indirect, special or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitations of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. For further information regarding this warranty, you may contact Lighthouse International Ltd., at 423 E Cleveland Avenue, Suite B, Spokane, WA 99207.



## ***Technical Information***

The **WARM WELCOME**® silicone rubber-insulated heaters are produced in a wide variety of sizes and in various voltages, but all share certain important similarities.

The heaters consist of one or more wire elements laminated and vulcanized between two plies of .026" thickness silicone rubber-impregnated fiberglass cloth. The heater may have holes for mounting screw clearance, or may have an acrylic pressure-sensitive mounting adhesive on one side. Lead wires of a suitable gauge, length and exit location are crimped to the element wires, and the lead exit is patched with additional silicone/fiberglass cloth.

The silicone rubber/fiberglass cloth material is a unique inorganic rubber suitable for use at temperatures from 100°F to +400°F. The silicone rubber is extremely resistant to acid, alkalis, ozone, water, fungus and most common solvents. Silicone will swell after long-term contact with some hydrocarbons, and is degraded by Xylene and KOH.

Heaters made with silicone/fiberglass cloth insulation are routinely U.L./C.S.A.-listed at wattages of 5 watts per square inch (/sq. in.) and operational temperatures of 350°F. In special cases, watt density may exceed 20 watts/sq. in. The **WARM WELCOME**® heaters operate at less than 1 watt/sq. in. and can be considered to be very conservatively de-rated.

The silicone rubber used in our heaters is non-toxic, fire-retardant and self-extinguishing. The very thin, .026" thickness of the silicone rubber provides over 2000 volts dielectric strength—many times the operating voltages used by our customers. Other heaters we produce for industrial applications operate at 220 and 480 volts.

The wire element in our heaters may be damaged by rough handling; in particular, repeated foldings which may break the internal wires. In typical customer use, this is not characteristic. The heaters are designed to withstand a five-pound pull on the lead wires, and should be installed with appropriate attention to preventing excessive strain on the lead exit. Also, the heaters should not be cut or pierced with sharp tools and should be protected accordingly. The heaters are not adversely affected by pressure as they are basically void-free laminates of fiberglass cloth, rubber and wire, and have operated well at pressures of several hundred pounds per square inch.

Lead wires are typically 19-strand, and may be insulated by Teflon® or silicone rubber. Other available constructions such as U.L.-type HPN cable or SJO-type cable are available. In general, the silicone rubber does not bond intimately with Teflon® or neoprene lead wire insulation, and heaters are not intended to be immersed in conductive liquids for long periods.

Heaters that have been damaged due to pulled-out lead wires may be repairable. Damage due to cuts through internal wires is not repairable. Punctures or scuffs that do not affect the heater resistance may be repaired with silicone RTV.

The superiority of the **WARM WELCOME**® Step Tread Heaters over other de-icing methods is evident in a number of ways:

1. ***No moving parts*** result in virtually maintenance-free operation.
2. ***No more chipping ice*** accumulations off the steps by your drivers.
3. ***Eliminates the need for salt or other chemical de-icers*** which compromise the integrity of your step wells.
4. ***Eliminates the need for sand***— extends the life of your treads and helps enable you to meet air quality standards.
5. ***Maintains the "grip" of your step treads***— prevents rubber from hardening in winter weather.
6. ***Environmentally compatible***—virtually no environmental impact.
7. ***Directly heats the treads***—far more efficient than indirect hot air employed by blowers.
8. ***Reduces liability claims.***
9. ***Available through all U.S. and Canadian manufacturers.***

# FEATHER WEIGHT

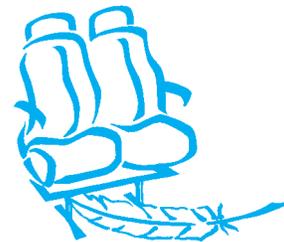
## FOLDAWAY BV & AM STYLES

Freedman Seating gives you the largest selection of Foldaways in the industry. Whether you need space for luggage or wheel chairs, we have the right seat. Easy to install and easier to operate, our Foldaways will provide you with miles and miles of happy riders and drivers. Maybe we should say, "smiles and smiles". Freedman Seating, "Not just seats — seating solutions."



Notch-Back, standard Bench-Back and High-Back are shown.

Not Just Seats



THE FEATHER WEIGHT SERIES BY

**FREEDMAN**

SEATING COMPANY

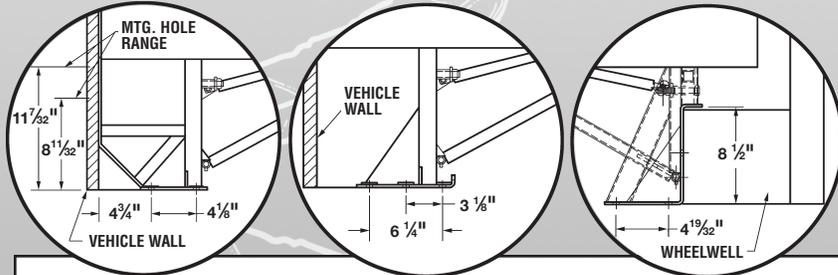
an ISO 9001:2000 certified company

Seating Solutions™

# FEATHER

# WEIGHT

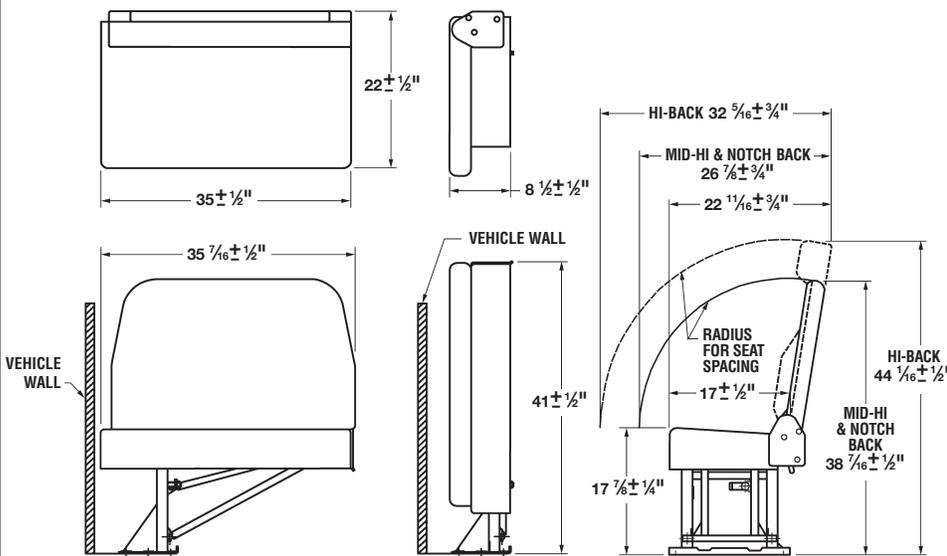
## Foldaway BV & AM STYLES



AM2 Floor/Wall Mount

BV Floor Mount

BVWW3 Floor Mount



Corner Grabs

TDSS with belts

TDSS without belts



Belts not included.

### Standard Features:

- BV Foldaways mount to the vehicle with four bolts to the floor (no wall mount)
- AM Foldaways mount to the vehicle with four bolts to the floor and two to the wall mount
- Seat belt ready (FMVSS 210 compliant with no leg or tether)
- Ultra-thin backrest for added hip-to-knee room and lumbar support
- High quality molded polyurethane seat and back cushions

- Folds up to less than 10" thick when in the stowed position
- Cantilever design provides reduced installation time; no floor cutting for aisle leg and easy vehicle clean up
- Wire mesh grid seat springs for even support
- 2 locking mechanisms to hold seat in stowed position

### Options:

- Single or double seats
- Bench back, notch back or high back
- Wheel well seats
- Wide variety of vinyl's or cloths
- Molded U.S. arms or upholstered arms
- Black or yellow top grabs (not on high backs)
- Black or yellow corner grabs (black side only on high back)
- Vertical stitching
- FTA foam
- ABS backs (Notchback only)
- Adjustable headrests (Single and Notchback only)
- Shrouds to cover the Foldaway when stowed
- USR seat belts (Under Seat Retractors)
- CRS-225 hooks and tethers
- TDSS (Tie Down Storage System)

## Not Just Seats



THE FEATHER WEIGHT SERIES BY

**FREEDMAN**  
SEATING COMPANY

an ISO 9001:2000 certified company

4545 W. Augusta Blvd., Chicago, IL 60651  
(773)524-2440 (800)443-4540 Fax: (773)252-7450  
WWW.FREEDMANSEATING.COM  
e-mail: sales@freedmanseat.com

We are constantly updating and improving our seats; therefore we reserve the right to change or modify specifications or materials without notice. All Freedman Seating Company seats meet or exceed FMVS standards.

Seating Solutions™

# FREEDMAN

# SEATING CAREGIVER

## **SAFETY FOR ALL PASSENGERS**

Standard 3PT seat belts with optional ICS (Integrated Child Seat) and/or CRS (Child Restraint System) for children



ICS Integrated Child Seat  
FMVSS compliant

Not Just Seats



THE FEATHER WEIGHT SERIES BY

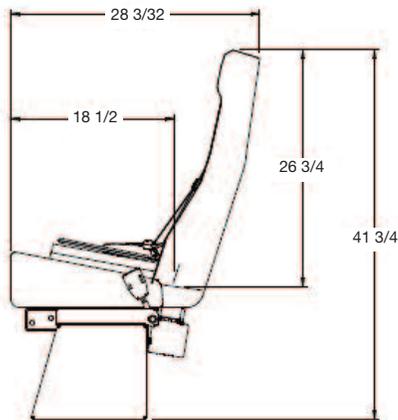
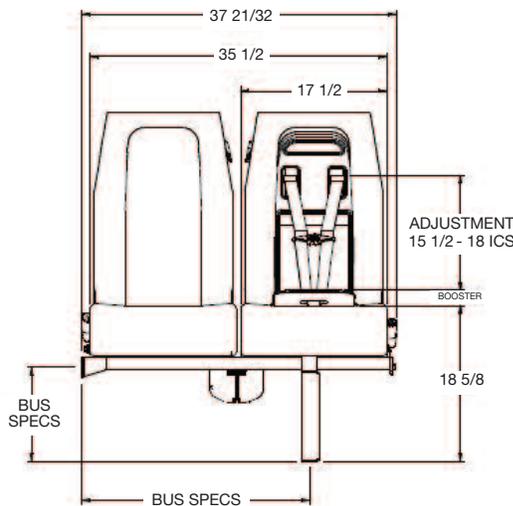
**FREEDMAN**  
SEATING COMPANY

Seating Solutions™

# FREEDMAN



3PT seat belts



# SEATING CAREGIVER

**Safety for all passengers. Standard 3PT seat belts with optional ICS (Integrated Child Seat) and/or CRS(Child Restraint System) for children.**

The newly upgraded Caregiver seat is designed for a comfortable, safe ride for both children and guardians. 3PT seat belts have been added for adults, while the optional ICS is available for children from 22-78 lbs. A tapered back provides unrestricted viewing for drivers, and best of all, the shoulder belts can be adjusted in seconds without taking the seat apart, avoiding clumsy operations.

#### Standard Features:

- Accommodates children 22–78 lbs
- Standard 3-point seat belts with FMVSS 207 and 210 seat belt anchorage compliance
- Fits where most 3PT seats were placed
- Use existing GO, GO-ES, or 3PT legs

#### Options:

- Available in a wide variety of vinyls and cloths
- Upholstered or US Arms
- Adjustable footrests
- Available as a single or double
- Optional Integrated Child Seat (ICS) accommodates children 22-78 lbs with FMVSS 213 Compliance
  - Fold down tongue can be folded to act as a booster seat
  - Easily adjustable ICS shoulder straps
- Optional Child Restraint System (CRS) with FMVSS 225 Compliance

Not Just Seats



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THE FEATHER WEIGHT SERIES BY  
**FREEDMAN**  
SEATING COMPANY

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(773)524-2440 (800)443-4540 Fax (773)252-7450  
WWW.FREEDMANSEATING.COM  
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Freedman Seating is committed to lessening our impact on the planet. For your convenience, materials are now available online to download at [www.freedmanseating.com](http://www.freedmanseating.com).

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# FEATHER WEIGHT

**MID-HI SEAT  
"ROCK SOLID"**



## Sustainable Seating Solutions

Freedman Seating Company's Feather Weight seats are designed to be like feathers on a bird: light and airy to satisfy weight restrictions and ensure a smooth ride, yet durable for years of service and low maintenance.

Freedman Seating Feather Weight seats are the most severely tested in the company's history, and meet all applicable federal motor vehicle safety standards for strength and safety (including 210 for seat belts). Less weight means one thing to bus builders and operators: they can get more passengers per bus. And when we say more passengers, ***we mean more happy passengers.***



Not Just Seats



THE FEATHER WEIGHT SERIES BY

**FREEDMAN**  
SEATING COMPANY

an ISO 9001:2000 certified company

Seating Solutions™

# FEATHER WEIGHT

## MID-HI SEAT "ROCK SOLID"



### Sustainable Seating Solutions

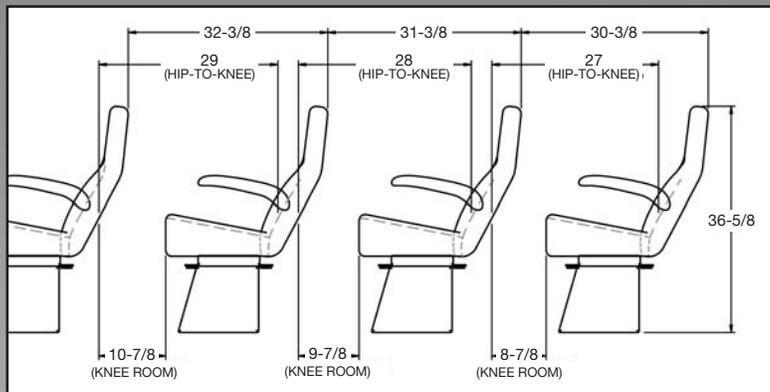
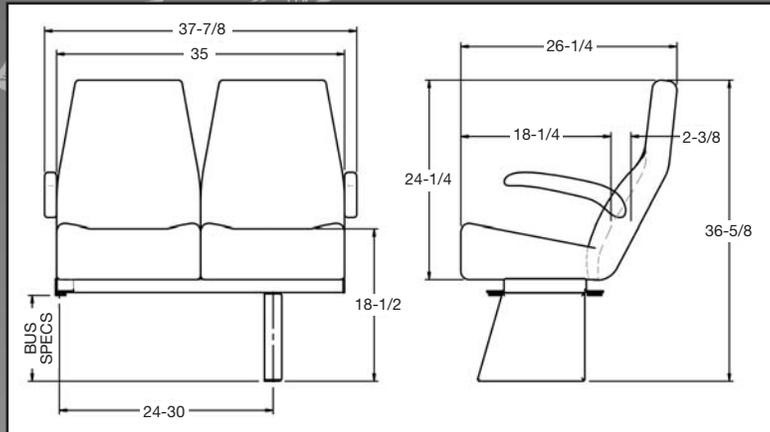
Whether your bus is for tour/charter, para-transit, or shuttle, Feather Weight Mid-Hi works for you. Optional adjustable headrests and reclining back-rests give you luxuries for long journeys, while grab rails and ABS plastic backs provide the function and safety required for shorter trips. The ultra-thin backrest gives outstanding support and creates more hip-to-knee room than any other seat in its class. The steel frame system meets or exceeds all applicable government standards for safety and durability. And, it's light as a feather!

#### Feather Weight Mid-Hi features include:

- An ultra-thin *Knee-Saver* type backrest for added hip-to-knee room and lumbar support
- Molded polyurethane seat and back cushions for comfort and long lasting support
- 17½" wide seat cushions
- 22½" back height off the seat cushion, 37" off the floor
- Wire mesh-grid seat springs for even support
- FMVSS 210 compliance—all *Feather Weight* seats are seat belt ready
- Transit style—rigid backrests (starting weight without options—43 lbs.)
- Touring style—reclining backrests (starting weight without options—47 lbs.)
- Covers that can be removed and replaced easily and without the use of special tools

#### Feather Weight Mid-Hi options include:

- Black molded U.S. Arms or upholstered flip-up armrests
- Adjustable headrests
- Black or yellow corner AV grab rails
- Black or yellow top AV grab rails
- ABS plastic backs
- Mesh map pockets
- Vertical stitching
- FTA foam
- Snack trays
- Aluminum folding footrests
- Pillow seat cushions
- Rear row quick disconnect
- Side sliders
- 16", 18" or 19" wide seats available
- Rigid or reclining backrests
- Seat belts
  - Non-retracting seat belts
  - Retracting seat belts
  - USR (Under Seat Retractors)
- S3 Bio-Cushions (Made with vegetable oil)
- A wide variety of cloths and vinyls
- S3 cloths (Made with recycled yarn)



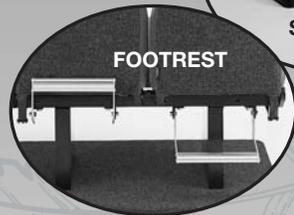
#### OPTIONS



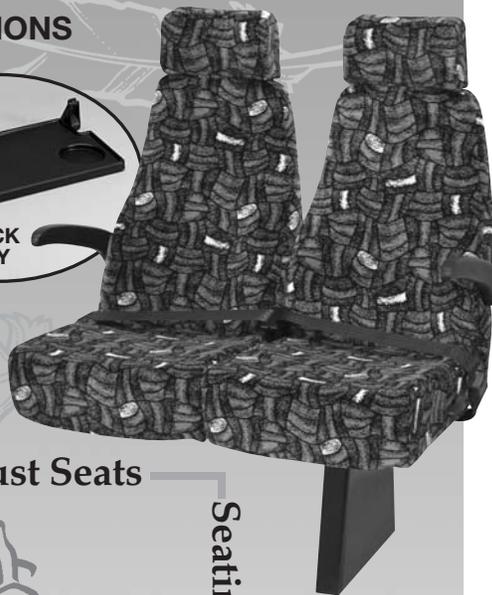
PILLOW SEAT



SNACK TRAY



FOOTREST



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SEATING COMPANY

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e-mail: sales@freedmanseat.com  
WWW.FREEDMANSEATING.COM

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ISO 9001:2000 registered

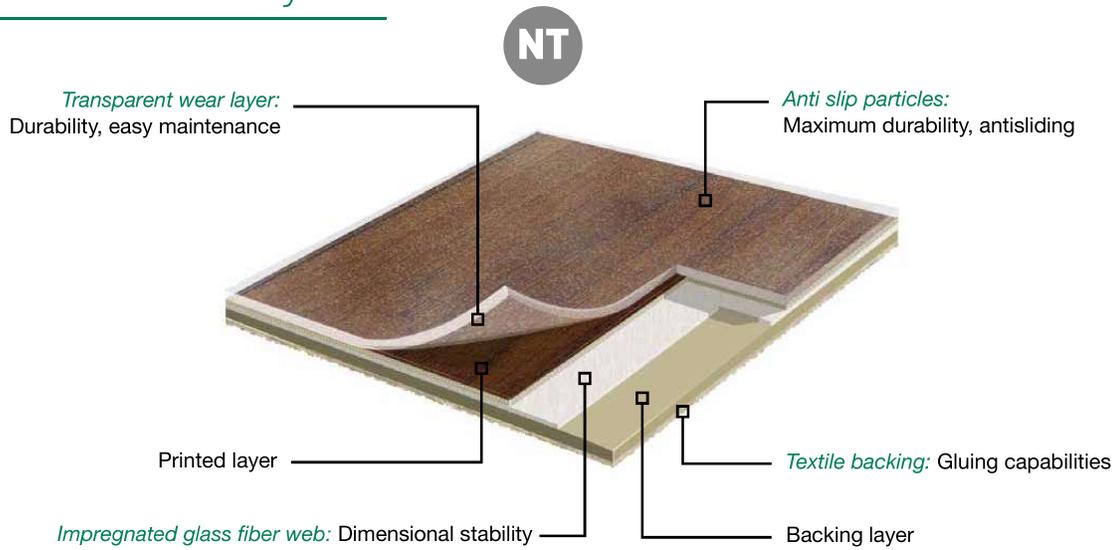


# TARABUS

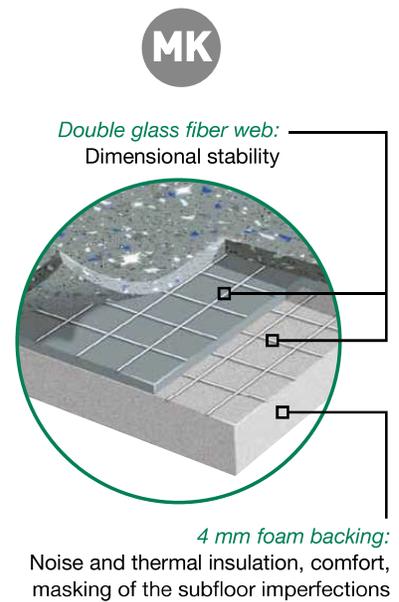
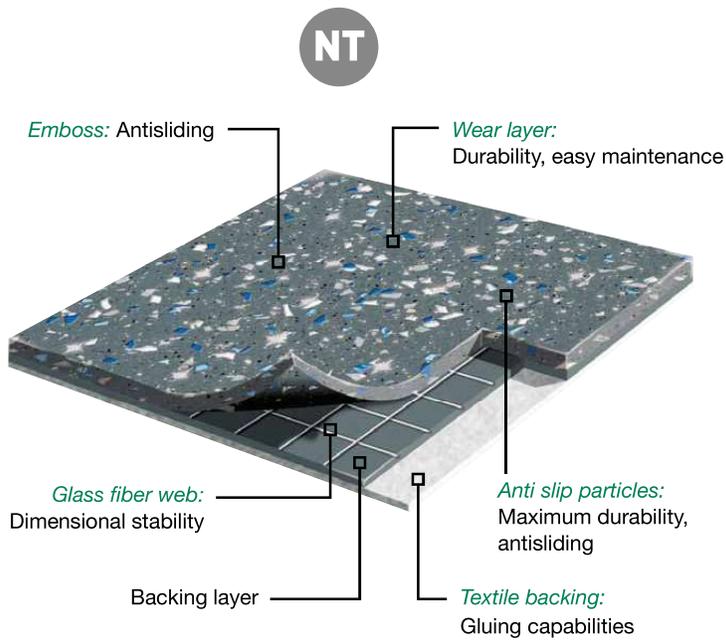
BUS & COACH FLOOR COVERINGS

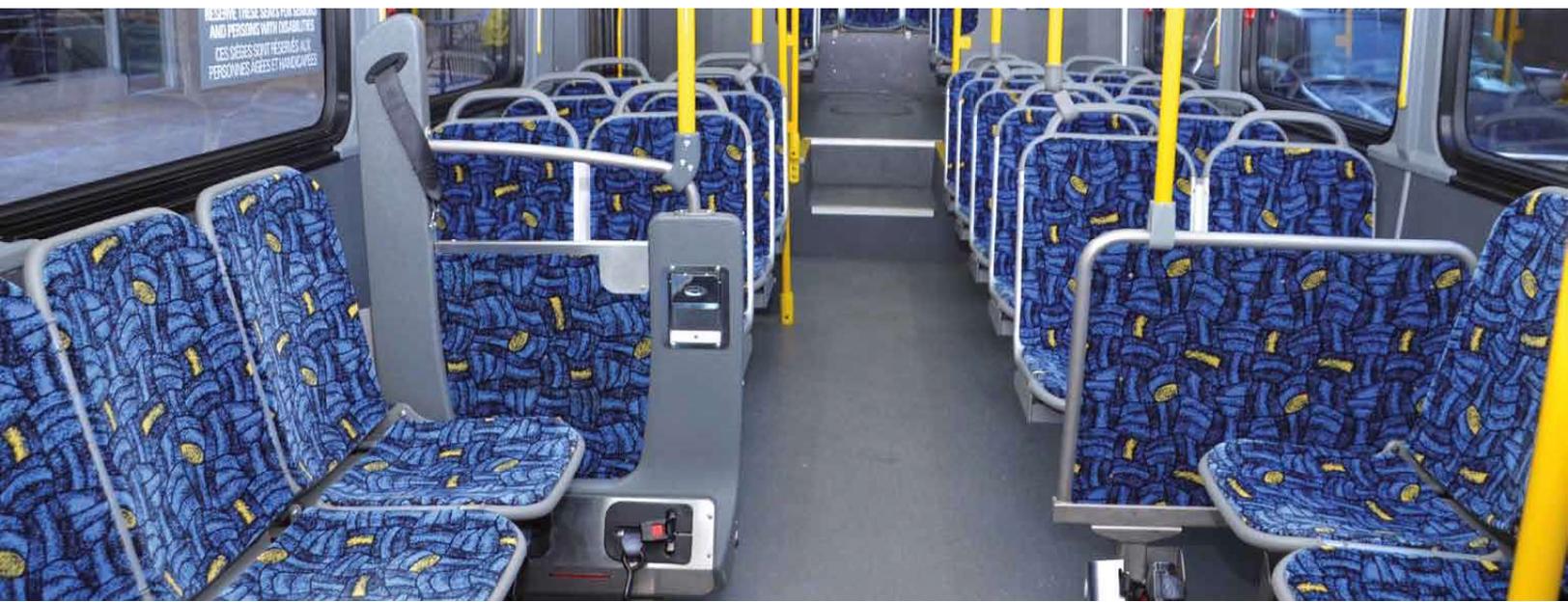
**Gerflor**<sup>®</sup>  
theflooringgroup

## ▶ Tarabus Gaya

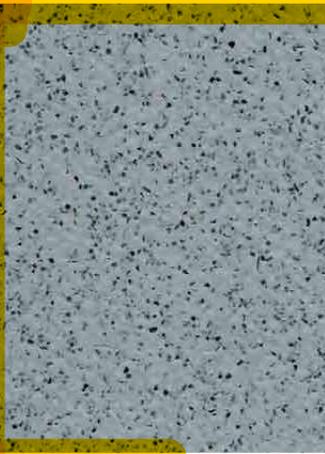


## ▶ Tarabus standard



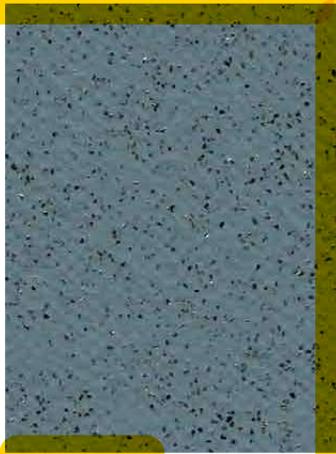


# SIRIUS



6768 Griffon

NT



6782 Dune

NT



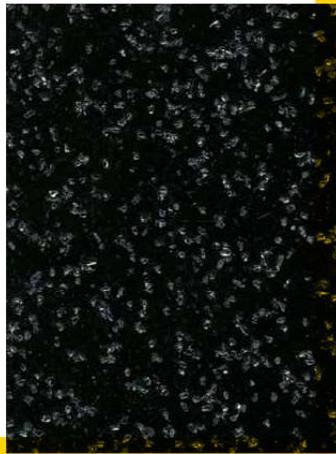
6451 Corsaire

NT



6727 Anthracite

NT



6801 Graphite

NT

# APOLLO



4776 Masan

MK

NT



4479 Kilimanjaro

MK

NT



4517 Fuji

MK

NT



05/2012

**GERFLOR USA**

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**tarabusbygerflor.com**

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# FREEDMAN

# T.D.S.S.

## Tie-Down Storage System

### Tie-Down Storage System and Retrofit kits

- Eliminates need for bulky storage bags or boxes
- Belts storage is quick and easy on the bottom of a Foldaway Seat
- Belts stay clean and easily accessible
- Decreases wheelchair tie down time—belts are right there
- No belt storage on floor
- Less chance of lost belts
- Works with standard “L” track fittings and the Q’Strait Slide n’ Click
- Available on Freedman Seating AM and BV Foldaways
- TDSS Retrofit kit is simple and easy to install with basic hand tools and requires no drilling or welding

TDSS-L Option to have TDSS for “L” track fittings on a foldaway

TDSS-LR Retrofit kit to add the TDSS for “L” track fitting on a foldaway

TDSS-SC Option to have TDSS for Slide n’ Click fittings on a foldaway

TDSS-SCR Retrofit kit to add the TDSS for Slide n’ Click fittings on a foldaway

Seat shown is a high/back BV Foldaway.



TDSS-L



TDSS-SC

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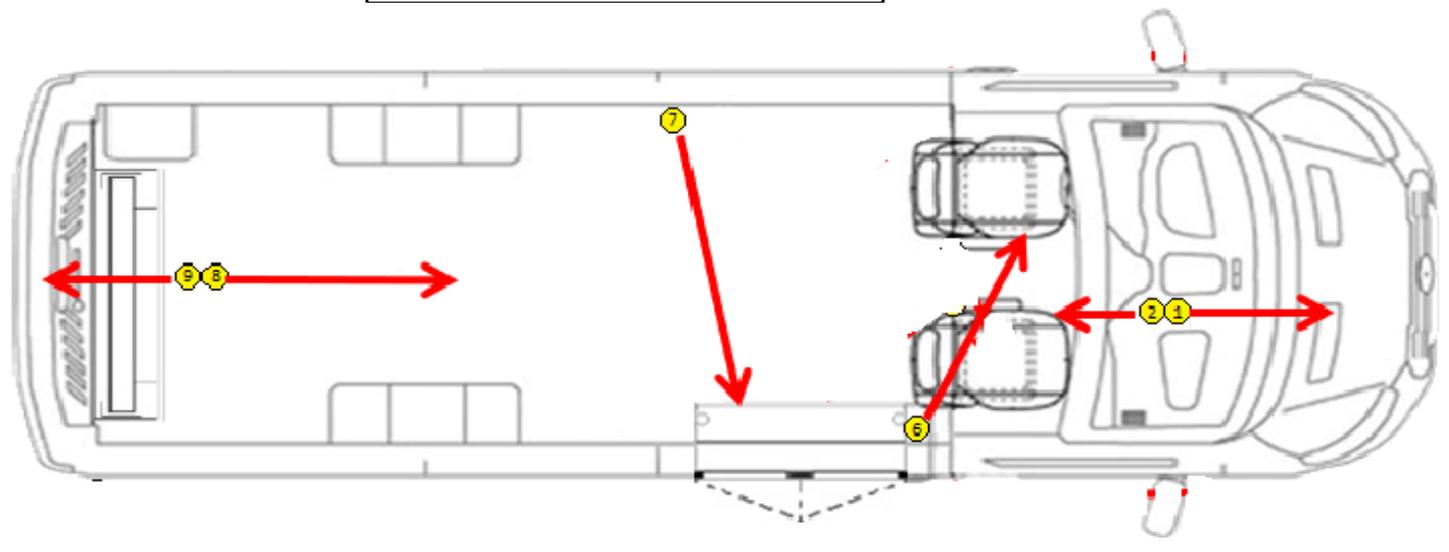
We are constantly updating and improving our seats; therefore we reserve the right to change or modify specifications or materials without notice. All Freedman Seating Company seats meet or exceed FMVS standards.

Belts not included.

Select Camera Locations

<input checked="" type="checkbox"/>	1
<input checked="" type="checkbox"/>	2
<input type="checkbox"/>	3
<input type="checkbox"/>	4
<input type="checkbox"/>	5
<input checked="" type="checkbox"/>	6
<input checked="" type="checkbox"/>	7
<input checked="" type="checkbox"/>	8
<input checked="" type="checkbox"/>	9
<input type="checkbox"/>	10
<input type="checkbox"/>	11
<input type="checkbox"/>	12
<input type="checkbox"/>	13
<input type="checkbox"/>	14

End User Name: WVDOT  
Filled Out By:



# Vulcan™ Series V12 HD/IP Mobile DVR

## 12-CHANNEL DVR

### DIMENSIONS

- Height: 3.5 inches
- Width: 8.7 inches
- Depth: 11.6 inches
- Weight: 5.7 pounds

### TWELVE (12) A/V INPUTS

- 8 channels D1, WD1, 720P, or up to 1080P + 4 channels IP up to 1080P

### VIDEO OUTPUTS

- 2 channels

### AUDIO OUTPUTS

- 2 channels

### CAMERA COMPATIBILITY

- 8 channels D1, WD1, 720P, or up to 1080P (see NTSC)
- 4 channels IP up to 1080P

### STORAGE MEDIA

#### RECORDING MEDIUM

- One (1) 2.5" SATA hard drive and one (1) optional solid-state SD card

#### CAPACITY

- 1TB (standard) up to 2TB (capable) (optional) 64GB SD card up to 512GB

#### RECORDING OPTIONS

- SD card slot for redundant recording

### INTERFACE

#### NETWORK DATA CONNECTION

- One RJ45 x 1 (10/100 M/1000M)

#### EXPANSION

- RS232 x 2, RS485 x 2

#### GPS INTERFACE

- Built-in, compatible with optional GPS antenna

### DRIVER ACTION DETECTION

#### PANIC BUTTON

- The remote status indicator (panic button) can be connected to show DVR power/record status without using a video monitor
- The driver-operated panic button has the following functions:
  - Solid green LED indicates that the unit has power and is recording
  - Event marker (panic button)

#### DRIVER ACTION DETECTION WIRES

- 8 signal wires individually programmable to indicate alarm or event



### BUILT-IN G-FORCE SENSOR

#### COMPRESSION FORMAT

- Video: H.264
- Audio: ADPCM, G.711A G.711U

### RECORD RESOLUTION

#### NTSC

- 1080P, 720P, WD1(928X480), WHD1(928X240), WCIF(464X240), D1(704x480), HD1(704x240), CIF(352x240)

#### PAL

- 1080P, 720P, WD1(928X576), WHD1(928X288), WCIF(464X288), D1(704X576), HD1(704x288), CIF(352x288)

#### RECORDING OPTIONS

- **Continuous record:** System will record all channels continuously while vehicle is running (factory setting).
- **Alarm record:** System will record when an alarm is triggered.
- **Motion record:** System will record when the cameras detect motion while vehicle is running.
- **Schedule record:** System will boot and record according to user-selectable schedule.

### ELECTRICAL & OPERATING REQUIREMENTS

#### AUTO ON/OFF DETECTION

- ACC detection

#### DELAY OFF SETTING

- User selectable up to 24 hours

#### OPERATING VOLTAGE

- 8~36VDC

#### OPERATING TEMPERATURE

- -14°F (-25°C) ~ +158°F (+70°C); -40°F (-40°C) ~ +158°F (+70°C) with heater

#### POWER CONSUMPTION

- 0W-105.3W

### POWER SUPPLY

#### INPUT RANGE

- DC 8-36V

#### OUTPUT RANGE

- DC5V/DC12V

#### OUTPUT CURRENT

- 5V@500mA, 12V@500mA

#### BUILT-IN POWER PROTECTION

#### LOW VOLTAGE PROTECTION

- User selectable and programmed at installation

#### HOUSING/CASING

- Removable, shock-mounted
- Vandal-resistant locking front cover
- Shock-resistant: MIL-STD-810F
- Aluminum
- Optional fan with filter, removable for cleaning

#### BUILT-IN WI-FI MODULE

### OPTIONAL COMPONENTS

#### VIRTUAL SYNCHRONIZED MAPPING

- External Virtual Synchronized Mapping™ module with North American maps
- Includes GPSV1 antenna
- Embeds GPS tracking information synchronized with recorded video footage

#### GPS ANTENNA

#### FIREPROOF BOX BACKUP

#### CELLULAR MODEM

Specifications, features and applications of use are subject to change without notice. ▼ 4/2017

# QRT<sup>®</sup>-1 SERIES



**MAX / DELUXE / STANDARD**  
4-POINT SECUREMENT  
WHEELCHAIR RETRACTORS



# QRT<sup>®</sup>-1 SERIES

## The Securement System That Changed Everything

The original 4-point wheelchair securement system, QRT-1 Series retractors defined the way passenger safety devices are designed and tested.

With a range of 3 different options to fit every need and every budget, the QRT-1 Series of retractors offer easy to use, effective 4-Point securement of wheelchairs for virtually any vehicle application.



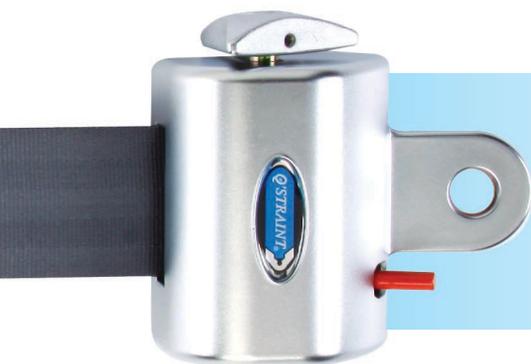
### QRT MAX

FULLY AUTOMATIC, premium knobless retractor that allows for one-handed operation.



### QRT DELUXE

SELF-LOCKING & SELF-TENSIONING retractor with ergonomic housing and dual tensioning knobs.



### QRT STANDARD

SEMI-AUTOMATIC retractor that meets all industry standards and specifications.



More than 30 years ago, Q'STRAIT introduced the world's first fully integrated 4-Point wheelchair passenger securement system, now an industry standard the world over.

**The QRT line of retractors are the linchpin of that system.**



Every QRT retractor is fully ADA compliant, and meets or exceeds all standards and regulations, including:

- SAE J2249, ISO 10542,
- FMVSS 209, 302, 210, 222
- CMVSS 209
- CSA Z605
- and 30mph/20g crash testing

## Anchorage Options

All QRT-1 Series Retractors are compatible with L-Track, L-Pockets and Slide 'N Click anchorages, or may be directly mounted to vehicle floors, seat legs or barriers.



### L-TRACK / L-POCKETS

For kits that use L-Track or L-Pocket anchorages, QRT Series retractors feature our patented Positive Lock Indicator (PLI) that clearly indicates when the fitting is locked in the anchorage.

### SLIDE 'N CLICK

For kits that include Slide 'N Click anchorages, QRT Series retractors feature a single-bolt SNC assembly and plunger that allows a full 360° rotation, eliminating anchorage alignment guesswork.

## QRT-1 SERIES FEATURES COMPARISON

	MAX	DLX	STD
<b>Knobless, One-Handed Operation.</b> No knobs to interfere with wheels and footrests.	●		
<b>Dual Tensioning Knobs.</b> Provides additional tensioning if needed.		●	
<b>Single Tensioning Knob.</b> Provides additional tensioning if needed.			●
<b>Automatic, Self-Locking.</b> Allows easy, one-handed hook-up.	●	●	
<b>Self-Tensioning.</b> Retractors automatically take up 'slack'.	●	●	
<b>Positive Lock Indicator.</b> Patented feature clearly indicates when fitting is locked in anchorage.	●	●	●
<b>Interchangeable.</b> Eliminates confusion: no right, left, front or rear locations.	●	●	●
<b>Low Profile &amp; Compact.</b> Elimination of mounting bracket allows retractors to fit under most footrests.	●	●	●
<b>Accommodates Larger Wheelchairs.</b> Reduced overall length leaves more room for wheelchairs.	●	●	
<b>Ultra-Durable.</b> Hardened steel and coated zinc for maximum corrosion resistance.	●	●	●
<b>Universal Design.</b> Accommodates virtually all wheelchair designs, including scooters.	●	●	●
<b>J-Hook.</b> Reduces twisting of belts and ensures proper securement for all wheelchair designs.	●	●	●
<b>Foot Release Lever.</b> Easy release eliminates the stress of bending down.	●	●	●



[WWW.QSTRAINT.COM/QRT-1-SERIES](http://WWW.QSTRAINT.COM/QRT-1-SERIES)

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Email: [info@tramanco.com.au](mailto:info@tramanco.com.au)



2018 Product Application Guide • 3-7-18



NL2 MILLENNIUM SERIES™

## NL2 Millennium Series™ Features

- Fully automatic NHTSA compliant lift, operated by an attendant
- Loading position - either direction
- Interfaces with OEM interlocks
- Lift mounted lights - platform illuminated as it deploys
- Hand control with illuminated functions
- Locking mechanical Inboard Barrier (IB), powder coated yellow for safety and high visibility, prevents movement if occupied
- Pump design prevents platform folding when occupied, quiet operation and low current draw
- Durable redesigned baseplate reduces lift weight and allows for quicker and easier service of hose/wiring
- Easily installed, step-by-step installation instructions, no peripheral hardware required
- Visual and audible warning provides notification of unsafe conditions
- Hydraulic outer barrier that will be in the fully up position before the platform leaves the ground, has durable rubber nose guard and is powder coated yellow for safety and high visibility
- Parallel arms lift with hydraulic cylinders
- Side or rear door application
- Two platform widths available
- Dual handrails for security and convenience
- Bridging feature permits the wheelchair user to board the lift from sidewalks or inclines
- Floor to ground travel is 48"
- Lifting capacity is 800 lbs
- Integrated back-up pump
- Equipped with an adjustable anti-rattle feature to avoid unpleasant noise in the vehicle during transit
- Durable high-gloss powder coated finish
- Lift-Tite system stows the lift platform securely while the vehicle is in transit
- Pump module with removable cover offers easy access to all components

# NL2 Millennium Series™ Models

## NL916IB-2 & NL916FIB-2

NHTSA Compliant Usable Platform: 30" x 51"

## NL917IB-2 & NL917FIB-2

NHTSA Compliant Usable Platform: 33" x 51"

## NL919IB-2 & NL919FIB-2

NHTSA Compliant Usable Platform: 34" x 51"

## NL917IB3751-2 & NL917FIB3751-2

NHTSA Compliant Usable Platform: 37" x 51"

General Function: Electrohydraulic, power up/gravity down operation

Operation: Hydraulic pump with two lifting cylinders

Control: hand-held control box

Hydraulic: Pressure Max. 2,495 psi, Fluid is Unisvis HVI 26, oil reservoir is .33 gal

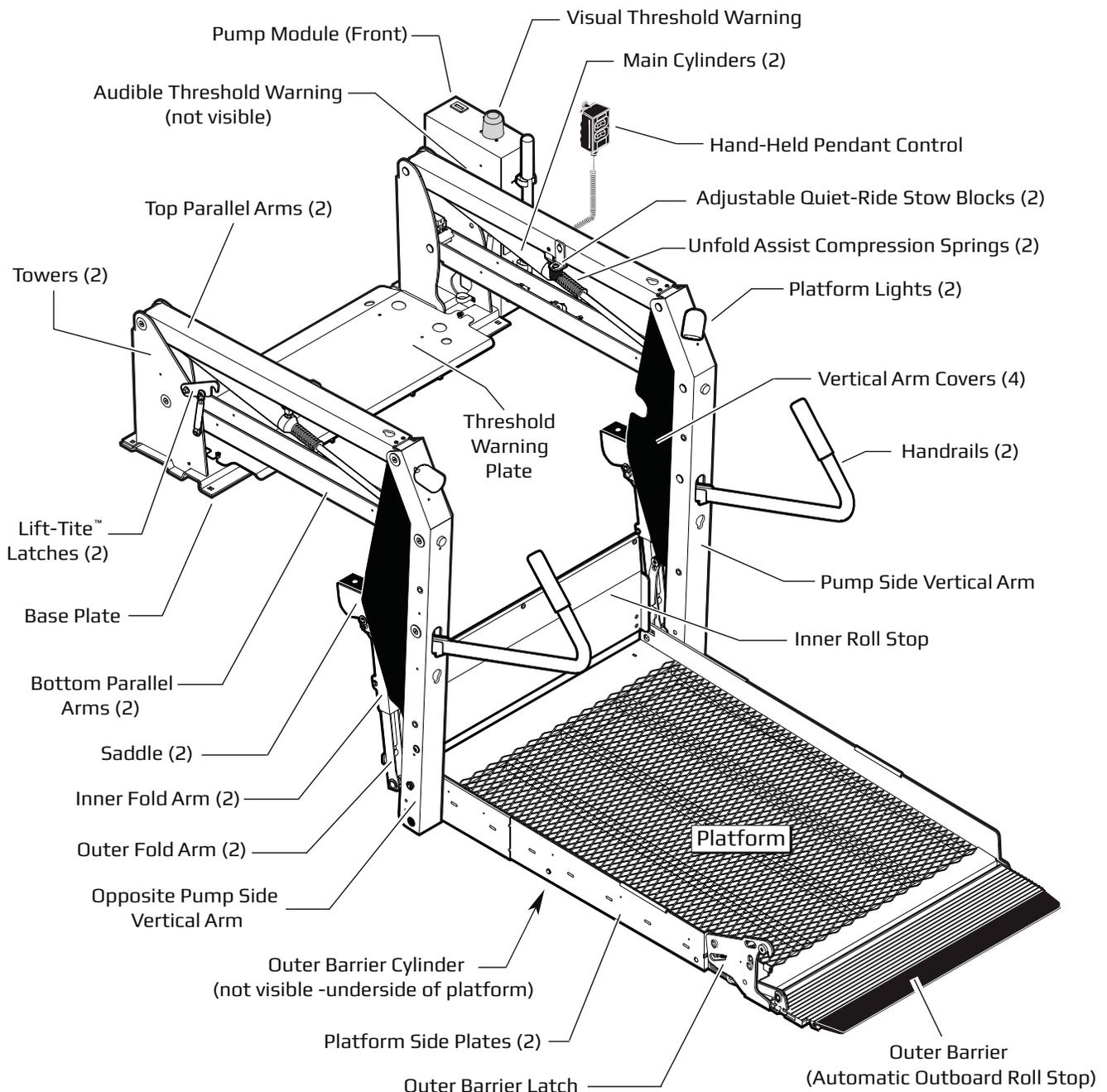
Construction: Steel structure with powder coat finish

Operating Temperature: 0°F to 140°F

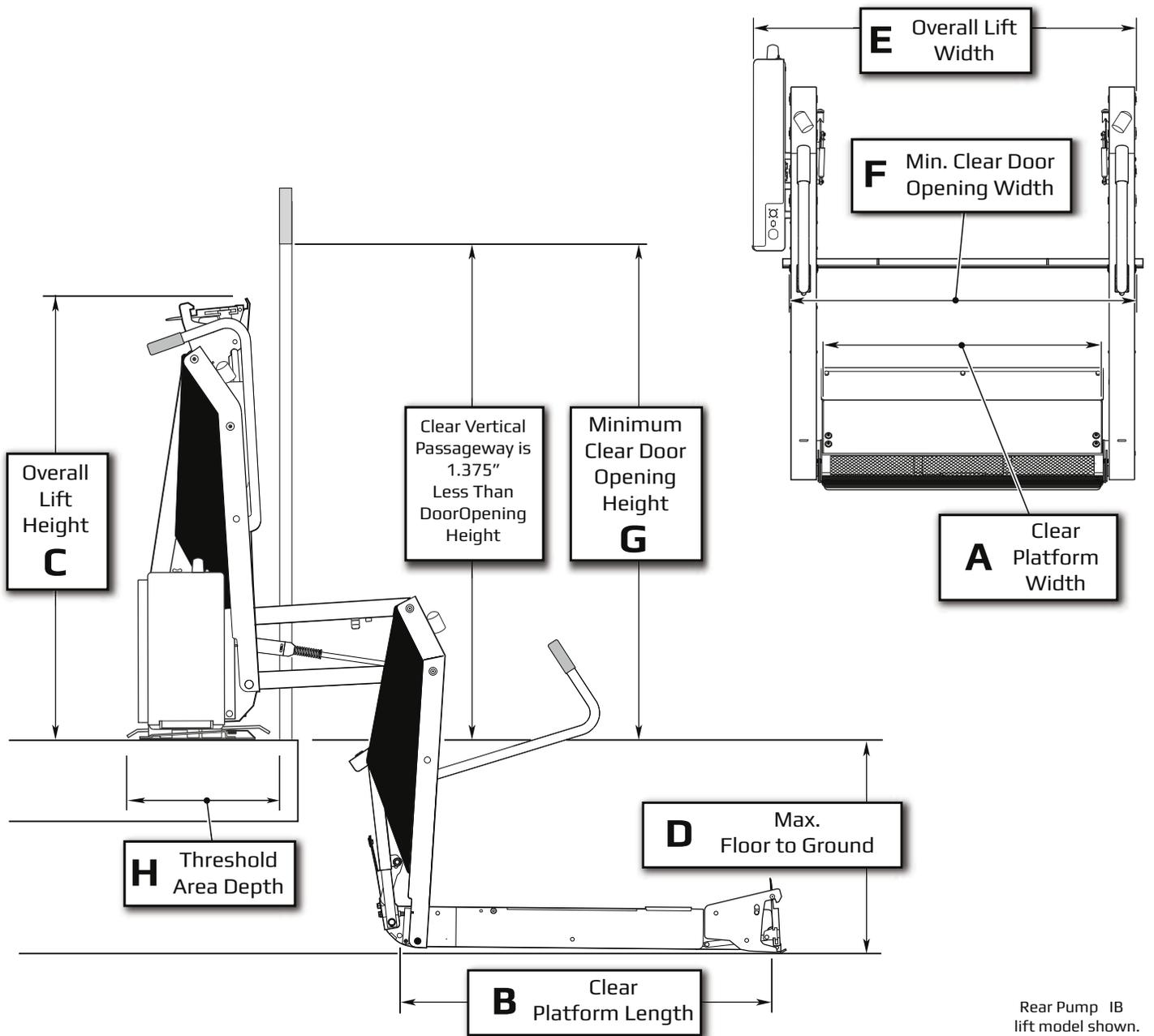
Power Supply: 12VDC

Current Consumption: Max. 70A (12V)

F = Front Pump IB = Inboard Barrier For a front-mounted pump assembly, add "F" to the model number when ordering (example: NL917FIB-2).



# NL2 Millennium Series™ Dimensions



All dimensions are for reference only.

NL2 Millennium Series™			A	B	C	D	E	F	G	H
Lift Model Number	Lift Weight lbs	Lifting Capacity lbs	Clear Platform Width	Clear Platform Length	Overall Lift Height	Max. Floor to Ground	Overall Lift Width	Min. Clear Door Opening Width	Min. Clear Door Opening Height	Threshold Area Depth
NL916IB-2 / NL916FIB-2	317	800	30"	51"	56.25"	48"	42.25"	39"	57.375"	18"
NL917IB-2 / NL917FIB-2	356	800	33"	51"	56.25"	48"	45.25"	42"	57.375"	18"
NL919IB-2 / NL919FIB-2	369	800	34"	51"	56.25"	48"	46.25"	43"	57.375"	18"
NL917IB3751-2 / NL917FIB3751-2	408	800	37"	51"	56.25"	48"	49.25"	46"	57.375"	18"

# NL2 Millennium Series™ NHTSA Installation Kits

	<u>Side Door</u>	<u>Side Door with Side Curtain Air Bags</u>	<u>Std. Length Rear Door</u>	<u>Ext. Length Rear Door</u>
<b>Dodge Ram Promaster</b> (2014 & up)	<b>38673KS</b>		<b>38674KS</b>	
<b>Ford E-Series</b>	<b>30956K</b>		<b>30957K</b>	<b>30970K-42</b>
<b>Ford Transit</b> (2015)	<b>400775KS</b>	<b>400534KS</b>	<b>400774KS</b>	<b>400773KS</b>
<b>Ford Transit Template</b> (2015)	<b>400779KS</b>	<b>400801KS</b>	<b>400778KS</b>	<b>400778KS</b>
<b>GM</b>	<b>30958K</b>		<b>30959K</b>	<b>30981K</b>
<b>\Sprinter</b> (2007 & up)	<b>34474KS</b>		<b>34120KS</b>	<b>401364KS</b>
<b>Sprinter</b> (2014 & up)				<b>401174KS</b>
<b>Sprinter Template</b> (2014 & up)				<b>401177KS</b>

Van Mounting Kits contain floor reinforcements for 403/404 compliance. Use NL916-2 models only for 2006 and older Sprinter side door.

# NL2 Millennium Series™ Accessories



◀ **31579KS**  
**Handrail Restraint**  
**Retractable -**  
**for 51" Platforms**

**35533KS**  
**Handrail Restraint**  
**Retractable -**  
**for 54" Platforms**

**35331KS**  
**Handrail Restraint**  
**Non-Retractable**



◀ **35295K**  
**Upper Tower Support Kit**



◀ **33659KS**  
**Replacement**  
**Hand-Held**  
**Control**



◀ **23708A913**  
**"Full Curtain"**  
**Lift Cover**  
**(NCL917-2)**



◀ **402606KS**  
**Padding Kit**  
**NCL2 Series**

# NL2 Millennium Series™ Specifications

## **COMMERCIAL WHEELCHAIR LIFT SPECIFICATIONS - IN COMPLIANCE WITH United States Department of Transportation Rules and Regulations 49CFR, Part 38. FROM THE AMERICANS WITH DISABILITIES ACT OF 1990 and NHTSA Rule 403 (2004) “Provided to make your spec writing easier.”**

The wheelchair lift is compliant with Federal Motor Vehicle Safety Standard 403 for platform lift systems for motor vehicles. The lift shall have been tested to a minimum static load of 2400#. The lift shall have 800# rated lifting capacity. The base plate shall be a corrugated designed member to provide rigidity to minimize lift deflection when placed under load.

The power supply shall be a 12 volt electro-hydraulic system operating two single-acting cylinders. The hydraulic power pack system shall be of modular design allowing for easy removal and field replacement, if needed. The operation of the unit shall provide a smooth, jerk-free ride in both up and down directions. The power operation of the hydraulic cylinders shall be of a pull-type design for smooth lifting operation and improved synchronous arm movement. The pivot pins in the trunnion (knuckle) of the pivot arms shall be of stationary design. The hydraulic system shall be regulated by two separate relief valves, one of which is designed to prevent accidental stowing when occupied.

The hand control for lift operation shall be of a one-hand operation design made of durable plastic. The hand control will provide user with illuminated functions. The hand control cable shall be coiled with quick-change connections for ease of maintenance or field change.

A manual back-up system shall be provided to ensure operation of the lift in case of electrical failure. The backup system shall provide a reliable means of manually raising and lowering the lift while occupied. The back-up system shall fold and unfold the platform. The back-up pump shall be integrated with the hydraulic power pack system such that no hydraulic lines or fittings are required.

The platform shall be of steel construction and the surface shall be of see-through grating allowing for improved visibility and safer use in inclement weather. The platform shall have a minimum usable wheelchair passageway width of 33 inches and a minimum usable length of 51 inches requiring a 57 inch vertical clear door opening. The sides of the platform shall be a minimum of 2.5 inches high.

The platform shall be automatically folded and unfolded and fully automatic in operation. The platform shall allow both inboard and outboard facing of wheelchair and mobility aid users. The platform entrance ramp shall be extruded aluminum for weight savings, have a rubber leading edge and raised ribs for traction. The outer barrier shall be hydraulically activated, and must be in the vertical (deployed) position prior to platform movement. The outer barrier must not raise if occupied with 25 lbs. The outer barrier shall be the sole outboard wheelchair retention device and shall be interlocked and comply with the FMVSS 403 requirements. Dual handrails shall be provided to add security and convenience. These handrails shall be 1.25 inch minimum diameter, minimum 30 inches in height, minimum of 8 inches in length, and withstand a 100# force in any direction (including vertical) without permanent deformation. The lift must have a fail safe system to prevent stowing if solenoid welds. The platform shall have “built in” lighting to meet 404 platform lighting requirements with no auxiliary lighting.

All lift components shall be finished with a baked-on powder coating, which will meet a salt spray test of 1000 hours, to provide corrosion resistance and a long service life. BraunAbility Millennium Series to include but not limited to the following model numbers:

- NL917IB-2, NL917FIB-2, NL919IB-2, NL919FIB-2, NL917IB3751-2, NL917FIB3751-2



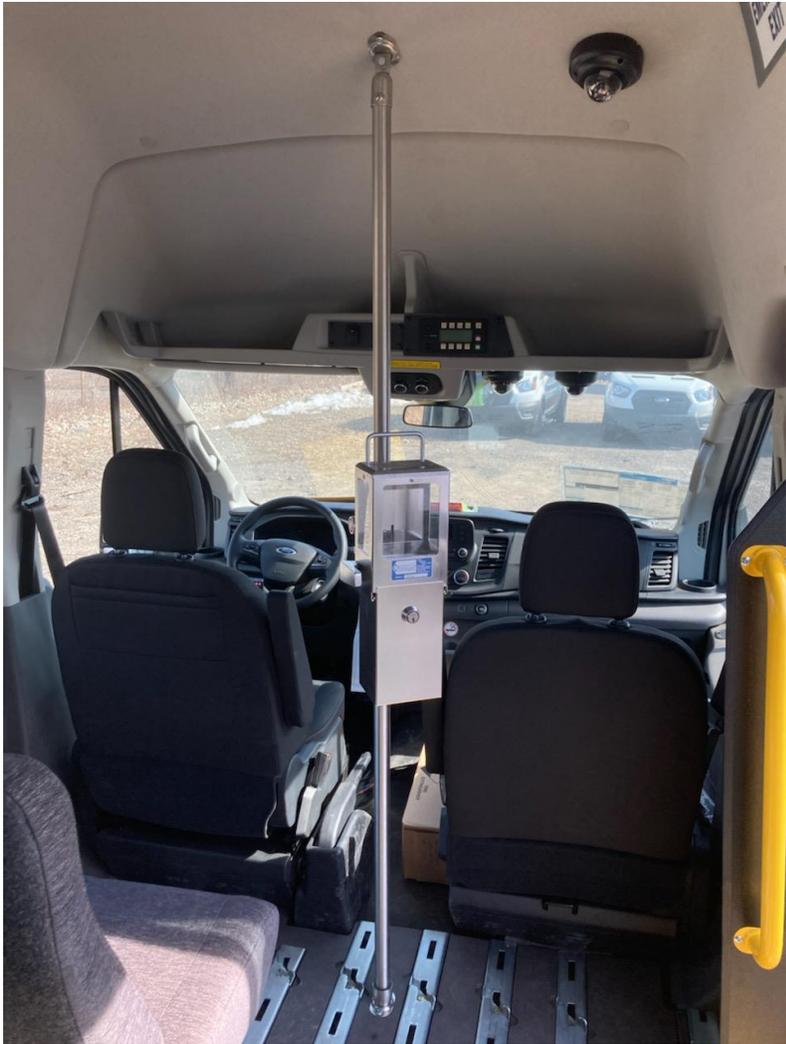
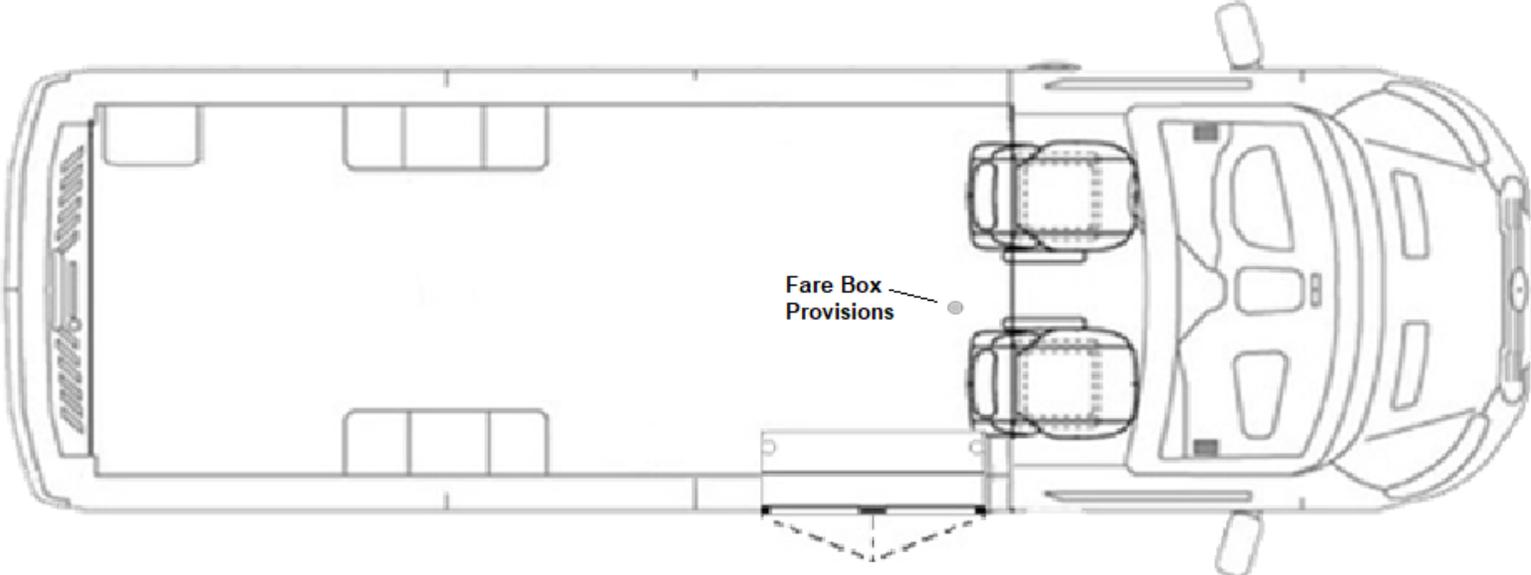
braunability.com

800.THE.LIFT

ISO 9001:2008

631 West 11th Street, Winamac, IN 46996, USA

# Fare Box Provisions



# TRANSIGN®

YOUR DESTINATION BEGINS HERE



The LED Destinator® Series - perfect for fleets of all types - is available in a variety of sizes and colors to fit your installation and display needs. These versatile and highly adaptive signs offer full integration into Destination, Route, and Next Stop announcement services, always keeping your customers pointed towards their next destination.



## STANDARD FEATURES

- Destination Messages
- Next Stop Announcements
- Public Relations Messaging
- Scrolling/Flashing/Stacked Messages

## SOFTWARE AND PROGRAMMING

Our signs and control modules are pre-programmed and include FREE software. Advanced controllers are available for J1708/J1587 system integration and Hands-Free operation, ensuring the safest and most reliable performance for any fleet.



## AVAILABLE ADVANCED FEATURES INCLUDE:

- Automated GPS message progression
- Hands-Free operation for safety
- Voice Announcements
- J1708/J1587 integration compatible
- Automatic brightness control
- Basic programming software included (USB)
- Maintenance free- ZERO cost of ownership
- Many OCU options to suit your needs



## BUY AMERICA - MADE IN U.S.A.

Using the highest quality parts, our LED Destinator® Signs are proudly made in Detroit, Michigan USA in full compliance with the Buy America Act.

## LED DESTINATOR™ WARRANTY INFO

With a lifetime warranty that outlasts the lifetime of most vehicles (100,000 hours at full brightness), our signs will exceed your expectations in reliability and performance.



## ABOUT TRANSIGN

Established in 1959, Transign is a leading provider of high-quality signage for the transit industry. We remain committed to providing world-class U.S. based customer service and technical support.

Transign®, 281 Collier Road, Auburn Hills, Michigan 48326  
Toll Free: 855.535.7446 | Main: 248.623.6400 | Fax: 248.623.2930  
www.transignllc.com

LED Destinator® Series

Est. 1959

# TRANSIGN®

YOUR DESTINATION BEGINS HERE

## LED Destinator® Electronic Signs - Dimensions

Signs	Pixel Count H x W (pixels)	Display H x W (in)	Enclosure H x W x D (in)
LD16160	16 x 160	6 1/2 x 63 1/8	9 1/2 x 64 3/8 x 2 3/8
LD16128	16 x 128	6 1/2 x 50 1/2	9 1/2 x 52 x 2 3/8
LD16112	16 x 112	6 1/2 x 44 1/8	9 1/2 x 45 3/4 x 2 3/8
LD1696	16 x 96	6 1/2 x 37 7/8	9 1/2 x 39 3/8 x 2 3/8
LD1680	16 x 80	6 1/2 x 31 5/8	9 1/2 x 33 x 2 3/8
LD1632	16 x 32	6 1/2 x 12 3/4	9 1/2 x 14 x 2 3/8
LD12112	12 x 112	4 7/8 x 44 1/8	8 x 45 3/4 x 2 3/8
LD1280	12 x 80	4 7/8 x 31 5/8	8 x 33 1/8 x 2 3/8
LD1232	12 x 32	4 3/4 x 12 3/4	8 x 14 x 2 3/8
LD896	8 x 96	3 1/4 x 37 7/8	6 3/8 x 39 3/8 x 2 3/8
LD864	8 x 64	3 1/4 x 25 1/4	6 3/8 x 26 3/4 x 2 3/8

Be sure to check out our other great products!



**Stop Request Signs**

- Flush, ceiling or surface mount
- Any font/color combination
- Back-lit by efficient LED's



**Interior Passenger Information Sign**

- Easy to install
- ADA compliant
- LED's rated at 100K hours



**Roller Curtain Signs**

- High-res logos & graphics
- Perfect for large fleets
- Virtually maintenance free
- Reliable, efficient LED backlight
- Available in 12 and 24 VDC
- Up to 120 destinations



**Run Number Box**

- Metal or plastic frame
- Available in 2, 3, or 4 digits
- Easy to read 4" lettering
- Spring loaded return
- Reliable, efficient LED backlight
- Virtually maintenance free



**LED Run Number Box**

- Steel enclosure
- ADA compliant
- Reliable LED's
- Multiple colors
- Automatic brightness
- 12 and 24 VDC

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[www.transignllc.com](http://www.transignllc.com)

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LED Destinator® Series

Est. 1959



Radio Engineering Industries, Inc.  
6534 L Street, Omaha, NE 68117  
800-228-9275 | Fax: 402-339-1704  
www.radioeng.com

## Panel Mounted PA System



# SPECIFICATIONS

## PA SYSTEM, 2"X7" MICRO PANEL W/MIC

REI PART No. 700829

### GENERAL

Power Supply	12VDC, Negative Ground
Current Consumption	Standby 150mA; Max 2.5A @14.4VDC
Dimensions(W X H X D)	6.654" x 1.969" x 2.890" [169 mm x 50 mm x 73.4 mm]
Weight	1.6 lbs
Load Impedance	4-8 Ohms
Power Output	6W into 4 Ohms at 14.4V (1kHz 10% THD max.)
Frequency Response	75-10,000 Hz (-3 dB)

# LED STROBE LIGHT

ENHANCED BUS VISIBILITY

**SPECIALTY  
MANUFACTURING**

A Safe Fleet Brand



4" model shown



Provides more down angle light to gain attention of pedestrians and motorists



#### SAFETY

Significantly improves vehicle visibility in any light conditions



#### EXTREME TEMP

Certified operation between -30° and 130°



#### MAINTENANCE

LED tower and circuit board are field replaceable for simplified maintenance



#### MOISTURE

Water resistant design exceeds SAE J845/575



#### DOWN BEAM

Optical design provides more down angle light to gain attention of pedestrians and motorists



#### SHOCK AND VIBRATION

Rough roads, potholes, and day-to-day jarring are no match for the solid state electronics. Tested to SAE J845/575 standards



#### ADAPTABLE

Composite base with rubber gasket adapts to various roof surfaces



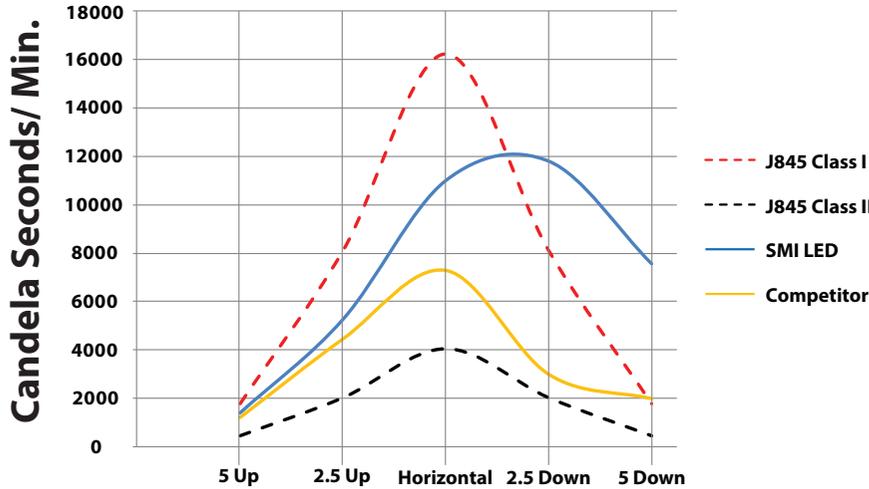
#### WARRANTY

5 year

- Exceeds SAE J845 Class II rating
- Composite base with rubber gasket adapts to various mounting surfaces
- Same hole pattern as Specialty Manufacturing's 515 model

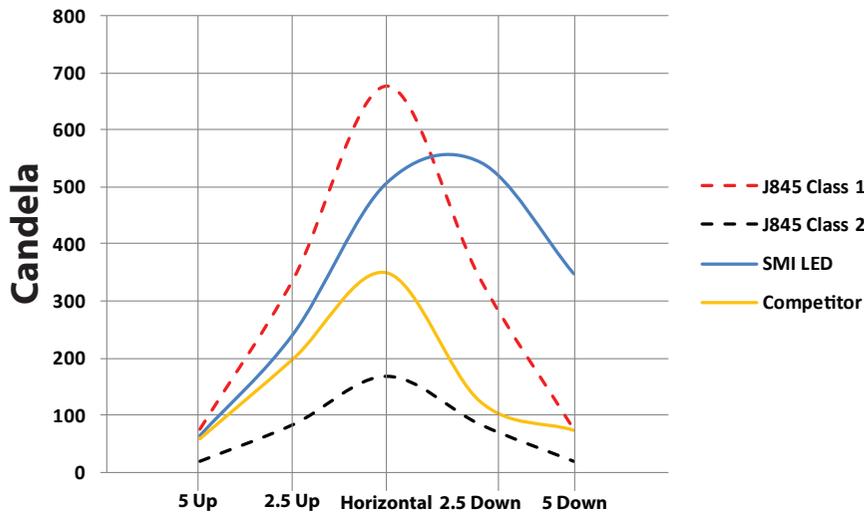
# THE SPECIALTY DIFFERENCE

## OPTICAL POWER



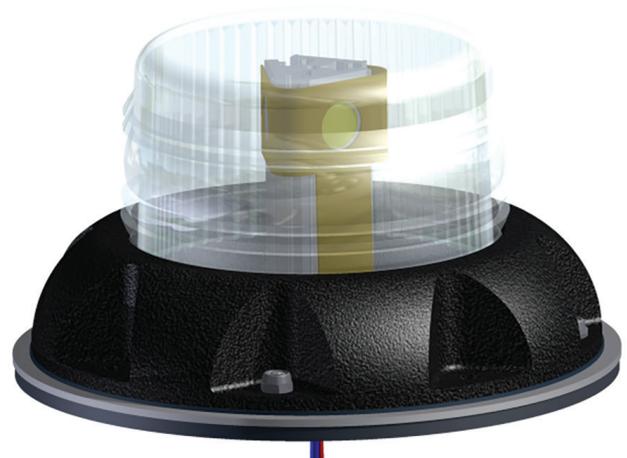
Optical Power is part of SAE J845. The purpose of this graph is to show the total energy emitted in a given length of time.

## PEAK INTENSITY



This graph illustrates how the Specialty LED Strobe outperforms the leading competitor + SAE J845 requirements.

The optical design of the Specialty strobe provides *4x's more down angle light than the competitive solution* which enhances bus visibility to motorists and pedestrians. It provides *nearly 5x's more down angle light than SAE J845 requirements for Class II strobes.*



Coming soon...the low profile LED strobe!



## Limited Warranty

End User \_\_\_\_\_ Vin # \_\_\_\_\_

Congratulations on the purchase of your MobilityTRANS converted vehicle. We are committed to excellence not only on the build of your product, but in the customer service after you have taken delivery. Please know that if any problems do arise on the installation of equipment or with materials fabricated by MobilityTRANS you are covered for the first year from the date you took ownership with no mileage restriction. Please refer to the information below for specifics on your coverage and claim procedures. Thank you for choosing MobilityTRANS.

### Warranty Description

**Warranty Period:** One (1) Year from date of delivery, Unlimited Mileage

**Coverage:** The original owner is covered for any defects in the workmanship and/or materials used to convert your vehicle. This is limited to materials fabricated and installed by MobilityTRANS.

**Coverage Limitations:** This warranty is non-transferable. MobilityTRANS will not cover items we determine have been damaged by neglect, misuse, accidents, unauthorized alterations, or failure to provide reasonable maintenance. MobilityTRANS is also not responsible for reimbursement for travel to and from a repair facility.

### Claim Procedure

**TO START THE WARRANTY PROCEDURE, CONTACT YOUR SELLING DEALER BEFORE ATTEMPTING CORRECTIONS WITHOUT AUTHORIZATION.**

**The selling dealer must contact MobilityTRANS before any corrective action is taken.** Notice must be by email or phone. **MobilityTRANS must respond and approve any corrective action before it is performed.** Once contacted MobilityTRANS will determine the best course of action to minimize time and inconvenience to you. All charges for repairs must be pre-approved. MobilityTRANS will pay the repair facility directly.

**Additional Warranty Coverage:** The chassis, engine, drivetrain, aftermarket air conditioning, seats, wheelchair lift, wheelchair tiedowns, aftermarket electronic components, lights and additional items not listed, are covered by separate warranties from their manufacturer. Warranty registration and claims procedures for these items are provided to the original owner in a delivery packet. MobilityTRANS does not warranty components not manufactured by MobilityTRANS. However, MobilityTRANS does warranty our installation of most equipment. Sometimes it's hard to be sure which warranty covers an issue, please contact your selling dealer for advice on how to proceed before having any repairs performed.

**Please sign below to acknowledge this warranty:**

Sign \_\_\_\_\_ Print Name: \_\_\_\_\_

Date: \_\_\_\_\_

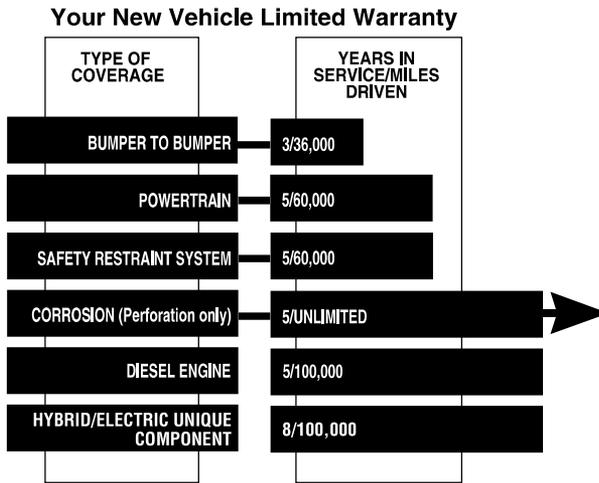
Scan and email this form to:  
[jessica@mobilitytrans.com](mailto:jessica@mobilitytrans.com) or  
[geri@mobilitytrans.com](mailto:geri@mobilitytrans.com)

## QUICK REFERENCE: WARRANTY COVERAGE

This chart gives a general summary of your warranty coverage provided by Ford Motor Company under the **New Vehicle Limited Warranty**. Please refer to the description of warranty coverage for more specific information.

For each type of coverage, the chart shows two measures:

- years in service
- miles driven



The measure that occurs first determines how long your coverage lasts. For example: Your Bumper to Bumper Coverage lasts for three years - unless you drive more than 36,000 miles before three years elapse. In that case, your coverage ends at 36,000 miles.

For more details on coverage, see:

- ➔ **What is Covered?** (pages 9-13)
- ➔ **What is Not Covered?** (pages 13-16)

# Limited Warranty

IVS, Inc. dba AngelTrax, warrants its product to be free from manufacturer’s defects in material and workmanship under normal use and service for the designated warranty period, as listed below, from the date of purchase. “Normal use” means the product was used for intended purposes, maintained properly and protected from deliberate damage. The following products are covered by the limited warranty for the following periods of time:

- **Five (5) years from date of purchase parts and labor on the Vulcan Series V5SD™, V5™, V5X3™, V6X3™, VX7AI™, V8X3™, V12™, V16-35™ and V24™ MDVRs**
- **Five (5) years from date of purchase parts and labor on the Vulcan Series Hybrid Component V8HCNVR™, V12HCNVR™ and V16HCNVR™**
- **Five (5) years from date of purchase parts and labor on the Vulcan Series V32™ Commercial NVR**
- **Five (5) years from date of purchase parts and labor on the Hybrid Component Series Hybrid Quest™, Hybrid Quest Edge™, Hybrid Quest Edge Plus™ and Hybrid Vault™ MDVRs**
- **Five (5) years from date of purchase parts and labor on the HDX Hybrid™ MDVR**
- **Three (3) years from date of purchase parts and labor on the HDX™ and SDX™ MDVRs**
- **Three (3) years from date of purchase parts and labor on the CoPilot™, CoPilot-WA™ and CoPilot-RFID™ MDVRs**
- **Five (5) years from date of purchase full replacement on all solid-state hard drives**
- **Five (5) years from date of purchase parts and labor on all SD cards**
- **Three (3) years from date of purchase parts and labor on all SATA hard drives**
- **Three (3) years from date of purchase parts and labor on the Vulcan Series IP and HD Cameras**
- **Three (3) years from date of purchase parts and labor on the HD Quality Lens Cameras**
- **Three (3) years from date of purchase parts and labor on the WM Series and Student Transit PeriOptic Lens Cameras**
- **Three (3) years from date of purchase parts and labor on the CoPilot™ Camera**
- **Three (3) years from date of purchase parts and labor on the Virtual Synchronized Mapping™ internal and external units**
- **Three (3) years from date of purchase parts and labor on the GDA-7012 Kit and GDA-7012 Monitor**
- **Three (3) years from date of purchase parts and labor on the WLAN and AP Router**
- **One (1) year from date of purchase parts and labor on the MON7AT installation monitor, the Meraki MR74 Wi-Fi system and all accessories not listed above**

This warranty gives the user specific rights, and those rights may vary from state to state. The terms and conditions of said warranty are as follows:

1. When the product is installed by, or purchased from an authorized AngelTrax dealer, IVS, Inc. will either repair, or replace at no charge to the original purchaser, any product that IVS, Inc. determines to be defective and under the warranty provided. The defect(s) must be reported within five (5) years from the date of purchase. This warranty is valid only with the original purchaser, and is non-transferable. The warranty does not cover removal or reinstallation of the product(s).
2. The date of purchase and proof of an authorized AngelTrax dealer installation must be established by the original sales receipt, which should accompany the product(s) that are returned for warranty services.
3. The warranty shall not apply to any product that has been altered in any way, or used for any unintended purpose.
4. IVS, Inc. does not authorize any other person to assume liability in connection with its products. This warranty is the only expressed warranty made by IVS, Inc. to its products. Any implied warranty of merchantability or fitness for a particular purpose applicable to IVS, Inc. products, is limited to the duration of this limited warranty. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, or limitation on how long an implied warranty lasts. Therefore, the above limitations may not apply.
5. If in the unlikely event warranty service becomes necessary, contact us directly and request a Return Merchandise Authorization (RMA) from the technical service department. Please call 1-800-673-1788 and ask for the technical service department to obtain a return merchandise authorization (RMA) number. Be sure to have the model number, serial number and the nature of the problem available for the technical service representative. Upon verification of a defect, IVS, Inc. will send a new or refurbished replacement unit via express shipping at no cost to the customer. The customer will receive a copy of the RMA and a Call Tag with their replacement unit. Once the customer has received the replacement unit, they have 30 days to ship the defective product back to IVS, Inc. or the customer will be charged for the replacement product. Once the unit is exchanged, the returned product shall become the property of IVS, Inc. The Call Tag included with the replacement unit allows the customer to ship the defective product back to IVS, Inc. at no cost.
6. Products must be returned to the factory in their original carton, or equivalent, and in original packaging conditions. Items shipped to IVS, Inc. without a clearly identified RMA number on the exterior of the packaging may be refused. If the product is received with the serial number removed or defaced, the warranty is void. The product will not be repaired under warranty and returned to the owner freight collect.

Send product to:  
 IVS, Inc. (AngelTrax)  
 Warranty Service Department  
 119 South Woodburn Drive  
 Dothan, Alabama 36305



# **Braun® Limited Warranty**

## **WARRANTY COVERAGE AND WARRANTY COVERAGE TIME PERIODS**

The Braun Corporation (“Braun”) warranty covers certain parts of this wheelchair lift for three (3) years or 10,000 cycles and the cost of labor to repair or replace those parts for one (1) year or 3,000 cycles. If The Braun Corporation receives the warranty registration card within 20 days after the lift is put into service, the warranty labor coverage will increase from one (1) year or 3,000 cycles to three (3) years or 10,000 cycles. In addition, providing the warranty registration card is returned as noted above, the following lift’s power train parts are warrantied for five (5) years or 15,000 cycles: Cable, Cylinder, Flow Control, Gear Box, Motor, Pump, Hydraulic Hose and Fittings. This limited warranty covers substantial defects in materials and workmanship of the lift, provided that the lift is operated and maintained properly and in conformity with the owner’s manual. The warranty period begins on the date that the product is delivered to the first retail purchaser by an independent, authorized dealer of Braun, or, if the dealer places the product into any type of service prior to retail sale, on the date the dealer first places the product in such service. This limited warranty applies only to the first purchaser. It may not be transferred.

## **WHAT BRAUN WILL DO TO CORRECT PROBLEMS**

In the event that a substantial defect in material or workmanship, attributable to Braun, is found to exist during the first year of warranty coverage, it will be repaired or replaced, at Braun’s option, without charge for parts or labor to the owner, in accordance with the terms, conditions and limitations of this limited warranty. If the substantial defect in material or workmanship, attributable to Braun, is found to exist during the second or third year of warranty coverage, it will be repaired or replaced, at Braun’s option, without charge to the owner for parts, only, in accordance with the terms, conditions and limitations of this limited warranty. Providing the warranty card is returned within 20 days as outlined above, the labor warranty period will be extended by two years of coverage in accordance with the terms, conditions, and limitations of this limited warranty. In addition, if a substantial defect in material or workmanship, attributable to Braun, is found to exist during the fourth or fifth year of warranty coverage to the following lift’s power train parts: Cable, Cylinder, Flow Control, Gear Box, Motor, Pump, Hydraulic Hose and Fittings, it will be repaired or replaced, at Braun’s option, without charge to the owner for parts, only, in accordance with the terms, conditions and limitations of this limited warranty. The cost of labor for repair or replacement at any time after the warranty coverage detailed above is the sole responsibility of the owner.

Braun’s obligation to repair or replace defective materials or workmanship is the sole obligation of Braun under this limited warranty. Braun reserves the right to use new or remanufactured parts of similar quality to complete any work, and to make parts and design changes from time to time without notice to anyone. Braun reserves the right to make changes in the design or material of its products without incurring any obligation to incorporate such changes in any previously manufactured product. Braun makes no warranty as to the future performance of this product, and this limited warranty is not intended to extend to the future performance of the product. In addition, the owner’s obligation to notify Braun, or one of its authorized, independent dealers, of a claimed defect does not modify any obligation placed on the owner to contact Braun directly when attempting to pursue remedies under state or federal law.

## **LIMITATIONS, EXCLUSIONS AND DISCLAIMER OF IMPLIED WARRANTIES**

**ANY IMPLIED WARRANTY THAT IS FOUND TO ARISE BY WAY OF STATE OR FEDERAL LAW, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR ANY IMPLIED WARRANTY OF FITNESS, IS LIMITED IN DURATION TO THE TERMS OF THIS LIMITED WARRANTY AND IS LIMITED IN SCOPE OF COVERAGE TO THE SCOPE OF COVERAGE OF THIS LIMITED WARRANTY.** Braun disclaims any express or implied warranty, including any implied warranty of fitness or merchantability, on items excluded from coverage as set forth in this limited warranty. Braun makes no warranty of any nature beyond that contained in this limited warranty. No one has authority to enlarge, amend or modify this limited warranty, and Braun does not authorize anyone to create any other obligation for it regarding this product. Braun is not responsible for any representation, promise or warranty made by any independent dealer or other person beyond what is expressly stated in this limited warranty. Any selling or servicing dealer is not Braun’s agent, but an independent entity.

## **Braun® Limited Warranty**

**BRAUN SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES THAT MAY RESULT FROM BREACH OF THIS LIMITED WARRANTY OR ANY IMPLIED WARRANTY. THIS EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES SHALL BE INDEPENDENT OF ANY FAILURE OF THE ESSENTIAL PURPOSE OF ANY WARRANTY, AND THIS EXCLUSION SHALL SURVIVE ANY DETERMINATION THAT THIS LIMITED WARRANTY OR ANY IMPLIED WARRANTY HAS FAILED OF ITS ESSENTIAL PURPOSE.** This warranty does not cover, and in no event shall Braun be liable for towing charges, travel, lodging, or any other expense incurred due to the loss of use of the product or other reason.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

### **HOW TO GET SERVICE**

To obtain warranty service the owner must do all of the following:

1. Notify an authorized service center, of the claimed defect attributable to Braun, within the warranty coverage period designated above
2. Provide the notification mentioned in (1), above, within ten (10) days of when the owner discovered, or should have discovered, the claimed defect
3. Promptly schedule an appointment with and take the product to an authorized service center for service.
4. Pay any transportation costs and all expenses associated with obtaining warranty service.

Since Braun does not control the scheduling of service work at the independent dealerships you may encounter some delay in scheduling or completion of work. If you need assistance you may contact Braun, at 631 West 11th Street, Winamac, Indiana 46996; 1-800-THE-LIFT, (843-5438).

If two (2) or more service attempts have been made to correct any covered defect that you believe impairs the value, use or safety of the product, or if it has taken longer than thirty (30) days for repairs to be completed, you must, to the extent permitted by law, notify Braun directly, in writing, at the above address, of the unsuccessful repair(s) of the alleged defect(s) so that Braun can become directly involved in providing service pursuant to the terms of this limited warranty.

### **WHAT IS NOT COVERED**

This Limited Warranty does not cover any of the following: defects in materials, components or parts of the product not attributable to Braun, any material, component or part of the product that is warranted by another entity (Note: the written warranty provided by the manufacturer of the material, component or part is the direct responsibility of that manufacturer); items that are added or changed after the product leaves Braun's possession; additional items installed at any dealership, or other place of business, or by any other party, other than Braun; normal wear, tear, usage, maintenance, service, periodic adjustments, the effects of condensation or moisture from condensation; mold or any damage caused by mold; imperfections that do not affect the product for its intended purpose; items that are working as designed but that you are unhappy with; problems related to mis-operation, misuse, mishandling, neglect or abuse, including failure to maintain the product in accordance with the owner's manual, or other routine maintenance such as inspections, lubricating, adjustments, tightening of screws, sealing, wheel alignments or rotating tires; damage due to accident or collision, including any acts of weather or damage or corrosion due to the environment; theft, vandalism, fire, or other intervening acts not attributable to Braun; damage resulting from tire wear or tire failure; defacing, scratches, dents or chips on any interior or exterior surface of the product, including those caused by rocks or other road hazards, damage caused by off road use, overloading or alteration of the product, or any of its components or parts.

Defects and/or damage to interior and exterior surfaces and other appearance items may occur at the factory or when the product is in transit. These items are usually detected and corrected at the factory or by

## **Braun® Limited Warranty**

a dealer prior to delivery to the purchaser. You must inspect the product for this type of damage when you take delivery. If you find any such defect or damage you must notify the selling dealer, or Braun, at the time of delivery to have these items covered by this limited warranty and to have work performed on the items at no cost to you as provided by this limited warranty.

### **EVENTS DISCHARGING BRAUN FROM OBLIGATION UNDER WARRANTY**

The following shall completely discharge Braun from any express or implied warranty obligation to repair or replace anything and void this warranty: misuse, neglect, collision, accidents, failure to provide routine maintenance (See Owner's Manual), unauthorized alteration, off road use, Acts of Nature, damage from weather or the environment, theft, vandalism, tampering, fire, explosions, overloading the product and odometer tampering.

### **LEGAL REMEDIES**

Any action to enforce any portion of this limited warranty, or any implied warranty, must be commenced within six (6) months after expiration of the warranty coverage period designated above or the action will be barred because of the passage of time. Any performance of repairs shall not suspend this limitation period from expiring. Any performance of repairs after the warranty coverage period has expired, or performance of repairs regarding any thing excluded from coverage under this limited warranty shall be considered "good will" repairs, and they will not alter the terms of this limited warranty, or extend the warranty coverage period or the filing limitation period in this paragraph. In addition, since it is reasonable to expect that the product will need some service during the warranty period; this warranty does not extend to future performance. It only sets forth what Braun will do and does not guarantee anything about the product for any time period. Nothing in this warranty, or any action of Braun, or any agent of Braun, shall be interpreted as an extension of any warranty period or the filing limitation period in this paragraph. Some states do not allow a reduction in the statute of limitations, so this reduction may not apply to you.

### **WARRANTY REGISTRATION and MISCELLANEOUS**

Your warranty registration records should be completed and delivered to the appropriate companies, including the Braun Delivery Checklist & Warranty form. That form must be returned to Braun within twenty (20) days of purchase. The Braun warranty will not be registered unless this warranty registration is completed and received by Braun. Failure to file this warranty registration with Braun will not affect your rights under this limited warranty as long as you can present proof of purchase, but it can cause delays in obtaining the benefits of this limited warranty, and it changes the start date of the warranty to the date of final assembly of the product by Braun.

Braun agrees to repair or replace any of its factory installed parts found to have substantial defects within the appropriate warranty period designated above, provided that the repair is authorized by Braun and carried out by an authorized service center (a Braun labor schedule determines the cost allowance for repairs). Braun will not honor any warranty claim for repairs or replacement of parts unless the claim is submitted with the appropriate paperwork, and the work is completed by an independent, factory authorized service center. The appropriate paperwork can be obtained by written or phone contact with Braun at the contact information in this warranty.

Braun reserves the right to designate where any warranty work can be performed. Braun also reserves the right to examine any defective workmanship or part prior to giving any authorization for warranty work. Braun's return authorization procedure must be adhered to in order to process any warranty claims.

**THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.**



## Gerflor Commercial Flooring limited warranty agreement – 10 Year Warranty

GERFLOR, AS A MANUFACTURER, expressly warrants that the GERFLOR COMMERCIAL FLOORCOVERING shall be free from manufacturing defects for a period of ten (10) years from the date of sales by Gerflor, provided such floorcovering are subject to normal use and receive proper maintenance.

This entire warranty will become null and void if conditions of the subflooring and method of installation do not conform exactly to GERFLOR specifications.

This entire warranty does not cover damage caused, in whole or in part, by conditions beyond our control, including, but not limited to :

- Use for which material is not designated.
- Fire, explosion, weather conditions or natural disasters.
- Faulty installation.
- Casualties.
- Ordinary wear and tear.
- Abuse.
- Faulty design or construction of the buildings.
- Failure of the adhesive to adhere to the subfloor, whether concrete or other material because of moisture migration or water vapor transmission through the subfloor.
- Fault in the subfloor.
- Failure in the vapor barriers.
- Failure of the installation contractors to adhere to specifications.
- Failure of the seams.
- Uneven wear of sections of the floorcovering.
- Gloss reduction from use.
- Alteration of the initial appearance of the floorcovering, particularly in high traffic areas and areas exposed to excessive wear due to sand, grit or dirt in entrances to buildings.
- Fading or discoloration from sunlight or heat.
- Damage caused by neglect or improper maintenance procedures and other causes not specified but beyond the control of GERFLOR.
- Damage due to stains, cuts, scratches, gouges, scuffs, punctures, tears, indentations due to loads in excess of the specified static load limit, burns, accidents, discoloration caused by tracking residue from carpet dyes, rubber or synthetic backing used on rugs or mats, painted or asphalt surfaces such as driveways, damage resulting from lack of, or improper, furniture rests and floor protectors, rubber or synthetic backed rugs or mats, or any intentional misuse of the floorcovering

The presence of moisture between the GERFLOR floorcovering and the subfloor shall be considered proof of subfloor failure or faulty design or construction of the building because moisture will break the bond between the adhesive and the subfloor, causing bubbles to appear.



## **Gerflor Commercial Flooring limited warranty agreement – 10 Year Warranty**

This warranty will be applied only if the product is admittedly the only cause of disorder. Your sole and exclusive remedy against GERFLOR arising from the purchase or use of floorcovering is limited to supply of material in replacement of the sole defective part of material (after examination, verification and approval by GERFLOR) with material of equivalent quality. All other compensation of whatever nature will be excluded. Warranty will only be valid if product and installation concerned by the warranty are clearly identified on this document and returned to Gerflor by mail with acknowledgement of receipt.

If the claim is accepted by GERFLOR, with respect to the warranty, GERFLOR will supply the material in replacement of defective one without any cost to you. More than 5 (five) years from the date of sale of the warranted product by Gerflor, until the expiration of this express warranty you will be responsible for 20 % (twenty per cent) per year of the cost of supplied materials.

### **WARRANTY DISCLAIMERS AND LIMITATIONS OF LIABILITY**

THE ABOVE EXPRESSED MANUFACTURER'S WARRANTY SHALL BE THE EXCLUSIVE WARRANTY and LIMITED TO THE QUALITY OF THE PRODUCT, and GERFLOR MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. GERFLOR EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE.

IT IS AGREED THAT GERFLOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, including, but not limited to, loss of income, loss of use, damage to other property, the cost of removing and reinstalling GERFLOR floorcoverings, attorney's fees, and any liability you may have with respect to any other person.

### **TIME LIMIT ON COMMENCING LEGAL ACTION**

It is agreed that you have 30 days from the accrual of a claim to inform GERFLOR by registered mail with acknowledgement of receipt.

It is agreed that you have one year from the accrual of a claim to commence any legal action arising from the purchase or use of GERFLOR floorcoverings, or be barred forever.

To the extent any provision of this Warranty Agreement contravenes the law of any jurisdiction, such provision shall be inapplicable in such jurisdiction, and the remainder of this Warranty Agreement shall not be affected thereby.

## **LIMITED WARRANTY**

### **WARRANTY PERIOD**

InterMotive warrants the product for the period of ***one year*** from the date the product was shipped from InterMotive (if not registered) or ***two years*** from the in-service date (if the warranty registration is completed on-line) for products that fail to function properly under normal use because of a manufacturing defect when installed and operated according to the manufacturer's instructions. The product will be repaired or replaced with a comparable product without charge.

- **Diagnostics** - A service facility diagnosing, installing, and/or repairing a product must follow the proper InterMotive procedures/documents – reference [www.intermotive.net](http://www.intermotive.net) or call 530-823-1048.
- **Labor Reimbursement** - Contact InterMotive prior to commencing diagnostic/repair for information on allowable labor reimbursements.
- **Return Goods Authorization** - The customer must contact InterMotive with the product serial number and obtain an RGA number prior to shipping the product to InterMotive.
- **Return Packaging** - The part being returned must have the RGA number and a detailed description of the symptom(s) or issue(s) the product is exhibiting attached to it. Packages received without an RGA number written on the outside will be refused delivery and returned to the customer at their expense.
- **Shipping** – Shipping is the initial responsibility of the customer. If the product is determined to be warrantable and is repaired or replaced, InterMotive will pay for shipping to and from the repairing facility for the repaired/replaced product via ground shipping within the U. S. and Canada. If the product does not qualify for a warranty repair or replacement, the customer is responsible for return shipping costs.

### **LIMITATION ON LIABILITY**

InterMotive will not be liable for personal injury, loss or damage to property or any incidental or consequential loss or expense from property damage due directly or indirectly from the use or installation of this product.



**13395 New Airport Rd Suite A, Auburn, CA 95602**

**Phone: (530) 823-1048 Fax: (530) 823-1516**

**[www.intermotive.net](http://www.intermotive.net) email – [customerservice@intermotive.net](mailto:customerservice@intermotive.net)**

# THANK YOU FOR CHOOSING Q'STRAIT PRODUCTS!

The warranty registration process takes just a few minutes and will require the following information:

- Serial Numbers located on the Warranty Card(s) or Product(s), and
- Your Vehicle(s) information (i.e. VIN, Make, Model and Year)
- Your privacy matters to us! Please [click here to read our privacy policy](#).

## Q'STRAIT'S WARRANTY POLICY

**Limited Warranty:** Q'Strait warrants this product conforms to our manufacturing specifications and is free from defects in materials and workmanship. Q'Strait or its authorized dealer will (at its sole option) repair or replace the defective component(s) free of charge. This warranty does not cover the cost of assembly or disassembly, transportation, labor, or any other incidental costs involved in the removal of a defective part or the installation of the replacement part.

Q'Strait or its authorized dealers reserves the right to inspect the product to verify the claimed defect has not been caused by non-Q'Strait approved maintenance or by foreign particles or substances. This warranty does not apply to defects that result from accident, misuse or abuse, intentional damage, fire, flood, alteration or modification of the product, negligence, exposure, or use of the product in a manner inconsistent with its intended use.

### Product Coverage

#### 5 Years\*

Q'POD (US), QRT-360 (US), QRT-350 (UK), QRT-550 (UK)

#### 3 Years\*

QRT MAX, QRT Deluxe, QLK-150 and The Q'UBE (US)

#### 2 Years\*

QRT Standard, Q-5000, M-Series, QLK-100 (US), QLK-110 (UK)  
(with proof of maintenance performed by a Q'Strait authorized dealer)

#### 1 Year

All other Systems, Products & Accessories

*\*Only valid if product is registered with Q'Straint. Otherwise, a one (1) year warranty applies to all products. Products must be installed by authorized Q'Straint dealer.*

## **SECTION 1 – LIMITED WARRANTY**

Specialty Manufacturing, Inc. d/b/a Safe Fleet Bus and Rail – Charlotte, NC Division (“Warrantor”) warrants to the original purchaser (“Customer”) of the new (not used) equipment and parts manufactured and sold by Warrantor under Warrantor’s Specialty Manufacturing™, SMI™, Pretoria™, and/or Transpec® brands (but excluding all video and/or telematics products and/or services, which are, instead, subject to the applicable warranty terms available at safefleet.net/product-and-service-warranties) to such Customer (collectively, the “Products”) that each of such Products will be free from manufacturing defects for the applicable period set forth in Section 2 below, in each case commencing on the Warranty Start Date (as defined below), provided that such Product is used under conditions of normal use, that regular periodic maintenance and service is performed, and that such Product was installed in accordance with the instructions published by the Warrantor or any of its affiliates, and all in accordance with the Product Documentation (as defined below) and subject to the other terms and conditions set forth below, and further provided that all warranties extend only to defective components, and not full assemblies (this “Limited Warranty”).

“Warranty Start Date” means the date of manufacture of the applicable Product, as designated by Warrantor.

This Limited Warranty is not transferable for any reason, including in the event the applicable Product is sold, traded, transferred or otherwise disposed of in any manner by the original purchaser to another party.

## **SECTION 2 - APPLICABLE WARRANTY PERIODS**

2.1 The applicable warranty period for each Product shall be as follows (as measured from the date of manufacture, as evidenced by Warrantor labeling):

STOP ARMS AND CROSSING ARMS: 3 years for Defender series, 2 years for all others (including 7 Series and Air)

PROLO, TRIPLE VALUE, DUAL PURPOSE, STANDARD SAFETY VENT, POWER and MSV ROOF HATCHES: 2 years on all electrical components, and 5 years on all other components

LED ROOF-MOUNTED STROBE LIGHTS: 5 years

DRIVER ALERT AND MERGE ALERT: 5 years

LED INTERIOR LIGHTING SYSTEMS: 12 years on LED arrays and power supplies, and 1 year on all other components

STEP TREAD: 3 years

ALL OTHER PRODUCTS (Including all service/replacement parts): 1 year

2.2 Notwithstanding the foregoing, and further subject to Section 2.3 below, in no event shall the warranty period exceed years for the cost of any labor performed with respect to any claim for a Product still under warranty.

2.3 When Warrantor replaces any part which is a component of a product listed above in this Section 2, the warranty period for such replacement part equals the warranty period remaining on such product at the time of such part replacement (i.e., furnishing the replacement part does not extend the original warranty period or start a new warranty period), but in no event extending beyond 90 days after the delivery date of such part, and is subject to all other terms and conditions of this Limited Warranty.

## **SECTION 3 – CERTAIN EXCLUSIONS FROM WARRANTY**

3.1 This Limited Warranty does not cover normal maintenance, service or adjustments, nor does it cover damage to Products relating to:

- a. Accident, alteration, misuse, negligence, abuse, vandalism or physical damage;
- b. Any repair, replacement or alteration by a facility not approved in advance by Warrantor;
- c. Improper installation (including electrical damage caused by improper installation) or failure to follow installation

instructions provided by Warrantor;

- d. Use inconsistent with the instruction manual, safety warnings, product labeling, datasheets, specification sheets and/or other installation, use, operation and technical documentation provided and/or published by the Warrantor or its affiliate (collectively, “Product Documentation”);
- e. Use of equipment or parts not manufactured by Warrantor;
- f. Fire, explosion, implosion, flood, earthquake, lightning strike, acid rain, chemical fallout, catastrophic event, or other act of God or nature;
- g. Exposure to excessive heat, moisture, other severe environmental conditions, or unintended uses and/or substances;
- h. Exposure to chemicals or other substances (other than cleaning agents specifically recommended in the Product Documentation);
- i. Acts or omissions of any carrier delivering any Products;
- j. Any failure to care for or maintain any Product in accordance with the Product Documentation;
- k. With respect to LED interior lighting systems: (i) the malfunction of fewer than 14 adjoining LEDs in the same light fixture of any length in a solid state LED interior lighting system; (ii) the malfunction of less than 5% of the total LEDs in the same light fixture of any length in a solid state LED interior lighting system; and/or (iii) a reduction of LED light output of less than 30%;
- l. Damage done to step treads caused in whole or in part by cuts, tears, damage from high heels, pivot points, spiked footwear, or sub-floor and/or substrate irregularities.

#### **SECTION 4 – CERTAIN ADDITIONAL CONDITIONS OF WARRANTY**

**4.1 In addition to the other exclusions, limitations, exceptions, qualifications and conditions set forth herein, this Limited Warranty is conditioned upon, and will be invalidated by failure to comply with any of, the following conditions:**

- a. All Products, and all ancillary equipment, components and parts, must be installed in accordance with the Product Documentation.
- b. Regular maintenance and service must be performed on all Products, in accordance with the Product Documentation.
- c. Products must be put to their intended use, in accordance with the Product Documentation.
- d. Replacement parts must be manufactured by Warrantor.
- e. Complete compliance with the claims procedure set forth in Section 5 below.
- f. Warrantor must have received full and timely payment of all invoices issued to Customer.

#### **SECTION 5 - NOTICE OF CLAIMS AND REPLACEMENT POLICY**

**5.1** Claims under this Limited Warranty must be in writing and presented to and received by Warrantor within the applicable warranty period set forth in Sections 1 and 2 above. All claims must include the serial number of the applicable Product, the name of the Customer (which must be the original purchaser), and the date (as to which Warrantor may require written evidence) the alleged defect was discovered. Within 30 business days of receiving a written claim pursuant to this Section 5.1, a member of Warrantor’s staff will contact Customer and arrange for a time and place for a Warrantor representative to inspect the applicable Product, if necessary, and/or Warrantor may require the return of the applicable Product. For clarity, in addition to the other provisions of this Section 5, all Limited Warranty claims MUST be fully approved by Warrantor, in its sole discretion, prior to the commencement of any repair or replacement work in respect of such claims. If Warrantor instructs Customer to return any Product to Warrantor, the item will be assigned a Return Goods Authorization (“RGA”) number and must be returned to Warrantor, with transportation charges prepaid, within 30 days of the RGA number being assigned. If the item is not returned within such 30-day period, this Limited Warranty automatically will terminate (and Warrantor will have no further liability or obligation) with respect to that Product.

- 5.2 After a representative of Warrantor inspects the applicable Product or otherwise assesses the problem, Warrantor will determine and take appropriate action (if any), in its sole discretion, to remedy the alleged problem. If the claim is for a manufacturing defect, Warrantor must be satisfied, in its sole discretion, that such Product was defective at the time it left Warrantor's factory.
- 5.3 If Warrantor ships a replacement part prior to receipt of the allegedly defective part it is intended to replace, such replacement part at Warrantor's discretion will be invoiced FOB Warrantor's facility, and upon receipt of such allegedly defective part, Warrantor will credit Customer's account if Warrantor determines, in its sole discretion, that such returned part is covered by this Limited Warranty. Warrantor may, in its sole discretion, use new or refurbished replacement parts for repairs and/or replace affected Products or parts with Products or parts that are materially functionally equivalent to the replaced Products or parts.
- 5.4 Warranty coverage applies only to original equipment supplied by Warrantor. Except as otherwise agreed by Warrantor in writing in its sole discretion, Warrantor assumes no responsibility or liability for the expense incurred for removal or installation of product requiring service and/or repair or any other labor costs; or for the expense of shipping, packaging, or handling; travel; or for the handling of product returned to sender after necessary service or repair.

## **SECTION 6 – REMEDY**

- 6.1 Customer's sole and exclusive remedy under this Limited Warranty is the repair or replacement of Products, as determined by Warrantor in its sole discretion, subject to the terms and conditions of this Limited Warranty.

## **SECTION 7 – INTERNATIONAL SHIPMENTS**

- 7.1 For all repaired and replacement Products shipped outside of the United States under this Limited Warranty:
- Customer / recipient is responsible for all taxes, levies, customs fees, import duties and the like imposed by the destination country.
  - Customer / recipient is responsible for assuring lawful importation into the destination country.
  - Recipient is the importer of record and must comply with all laws and regulations of the destination country.
  - Product Documentation may not be in destination country languages.
  - Products, Product Documentation and other accompanying materials may not be designed in accordance with destination country standards, specifications, and labeling or other requirements.
  - Service / labor to repair or replace any Product or part thereof (whether configured or non-configured) is not covered (except that it is covered solely in Canada and solely in the case of configured parts).

## **SECTION 8 - LIMITATION OF LIABILITY**

- 8.1 THIS LIMITED WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY OF ANY KIND WITH RESPECT TO PRODUCTS AND SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IN ANY MANNER RELATED TO ANY PRODUCTS, WHETHER ORAL, WRITTEN, OR ARISING BY COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE, OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY, NON-INFRINGEMENT, OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, AND NO DEALER, DISTRIBUTOR OR OTHER SUPPLIER OF PRODUCTS OR ANY OTHER PARTY HAS THE AUTHORITY TO MODIFY OR AMEND THIS LIMITED WARRANTY IN ANY RESPECT WITHOUT THE EXPRESS PRIOR WRITTEN CONSENT OF WARRANTOR (WHICH WARRANTOR MAY WITHHOLD AT ANY TIME AND FOR ANY REASON IN ITS SOLE DISCRETION).
- 8.2 IN NO EVENT SHALL WARRANTOR BE LIABLE FOR ANY OTHER DAMAGE OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY OR PUNITIVE DAMAGES, WHETHER OR NOT SUCH DAMAGE WAS FORESEEABLE, AND EVEN IF INFORMED OF THE POSSIBILITY OF SUCH DAMAGES, AND NOTWITHSTANDING THE FAILURE OF ANY AGREED OR OTHER

REMEDY OF ITS ESSENTIAL PURPOSE, IN ALL CASES WHETHER AS THE RESULT OF OR BASED ON ACTUAL OR ALLEGED BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING ANY FORM OF NEGLIGENCE), STRICT LIABILITY, OR ANY OTHER THEORY, INCLUDING, WITHOUT LIMITATION, LABOR OR EQUIPMENT REQUIRED TO REMOVE AND/OR REINSTALL ORIGINAL OR REPLACEMENT PRODUCT(S) OR PARTS, LOSS OF TIME, PROFITS, SALES OR REVENUES, LACK OR LOSS OF PRODUCTIVITY, INTEREST CHARGES OR COST OF CAPITAL, COST OF SUBSTITUTE EQUIPMENT, SYSTEMS, SERVICES OR DOWNTIME COSTS, DEATH OR PERSONAL INJURY, DAMAGE TO OR LOSS OF USE OF PROPERTY OR EQUIPMENT, OR ANY INCONVENIENCE ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY OR ANY OBLIGATIONS HEREUNDER.

- 8.3 NO STATEMENT MADE BY ANY PERSON WITH RESPECT TO ANY PRODUCT SHALL CONSTITUTE A WARRANTY, BE RELIED UPON BY ANY CUSTOMER OR ANY OTHER PARTY, OR BE DEEMED PART OF THIS LIMITED WARRANTY OR ANY SALE AGREEMENT BETWEEN WARRANTOR AND ANY CUSTOMER.
- 8.4 WARRANTOR RESERVES THE RIGHT TO MODIFY OR DISCONTINUE THIS LIMITED WARRANTY AT ANY TIME AND FOR ANY REASON IN ITS SOLE DISCRETION, WITH OR WITHOUT NOTICE, PROVIDED THAT ANY SUCH MODIFICATION OR DISCONTINUANCE WILL BE EFFECTIVE ONLY WITH RESPECT TO ANY PRODUCT PURCHASED AFTER SUCH MODIFICATION OR DISCONTINUANCE HAS OCCURRED. IN ADDITION, WARRANTOR RESERVES THE RIGHT TO CHANGE ITS PRODUCTS (INCLUDING BUT NOT LIMITED TO THEIR DESIGN, MATERIAL COMPOSITION AND/OR COMPONENTS) FROM TIME TO TIME WITHOUT NOTICE AND WITH NO OBLIGATION TO MAINTAIN SPECIFIC SPARE PARTS OR TO MAKE CORRESPONDING CHANGES IN WARRANTOR'S PREVIOUSLY MANUFACTURED PRODUCTS.



SERVING THE BUS TRANSPORTATION INDUSTRY

**WARRANTY – 1 year /  
Unlimited mileage**

Warranty File Date	Failure Date
_____	_____
Servicing Agency	Contact Name
_____	_____
Vehicle VIN	Contact Phone No
_____	_____
A&M Systems Model No	A&M Systems Serial No
_____	_____
A&M Systems Build Date	In-Service Date
_____	_____
Mileage	RGA Number
_____	_____
Warranty Claim No	_____

**Description of Defect**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Work Performed**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

All defective materials must be removed without additional damage to the unit and returned to A&M Systems, Inc. for evaluation before warranty will be issued.

A & M Systems  
4121 Eastland Drive  
Elkhart, IN 46516.

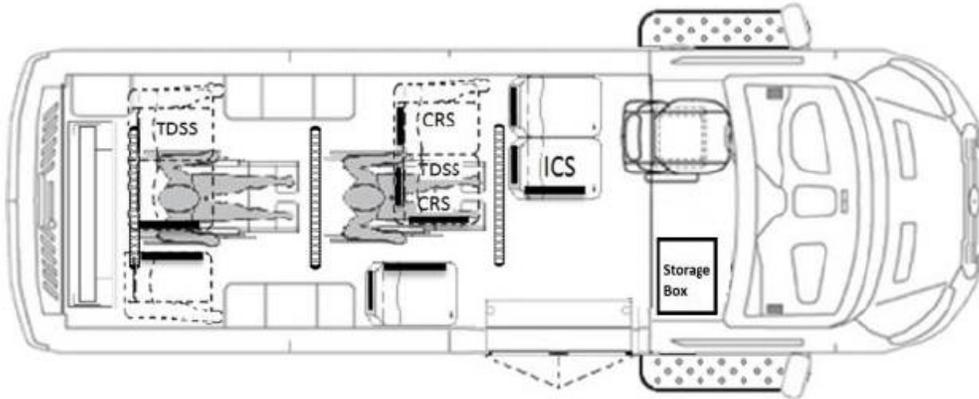
Ph. 574 -522-5000

## Mechanical Description Of Vehicle

### Class A

Ford Factory Ordered Transit Chassis			
Description	Color	Chassis	Eng
2021 T-350 High Roof 148EL Sliding Door GVWR 10,360# GVWR	Oxford White	U4X	3.5L Eco
1 Wheelchair On 148"-EL Wheel Base - High Roof Wagon Without Seats			
1 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option		<a href="#">Details</a>
1 2 Passenger with one ICS10 Feather Weight Mid Back - Forward Facing Fixed (No Belts) With Integrated Child Seat, 1 Recliner			<a href="#">Details</a>
2 2 Passenger Feather Weight Mid Back Fold Away (No Belts)	# CRS Option	1	<a href="#">Details</a>
8 Upgrade To Freedman Level 3.5 Seats, Per Seating Position	Enter Color:	Medallion	<a href="#">- Link</a>
5 Seat Top Mounted Grab Handle	Choose Type:	Black	
5 US Armrest, Black Molded, Available For Aisle Side Seat Only			
4 2pt Seat Belt Extender    8" <input type="checkbox"/> 12" <input checked="" type="checkbox"/> 18" <input type="checkbox"/>			
1 USR 1 Pass Fixed Under Seat Retract 75" 2pt	1 # Of Curbside Seats		# Of Street Side Seats
1 USR 2 Pass Fixed Under Seat Retract 75" 2pt	# Of Curbside Seats		1 # Of Street Side Seats
1 USR 1 Pass Fold Under Seat Retract 75" 2pt	1 # Of Curbside Seats		# Of Street Side Seats
2 USR 2 Pass Fold Under Seat Retract 75" 2pt	# Of Curbside Seats		2 # Of Street Side Seats
1 Add Additional Wheelchair Location With QRT Deluxe Tiedowns, L-Pod Anchors, Lap & Non-Retractable Shoulder Belts			
2 Tiedown Web Loops (4-Per Wheelchair)			
2 T.D.S.S. L-TRACK Tiedown Storage System Under A Freedman Double Fold-Away Seat			
1 Upgrade To Braun Millennium 37" Lift	Add Hand Belt <input checked="" type="checkbox"/>		
1 High Engine Idle Option For Intermotive Interlock System			
1 Marine Grade Plywood (Upgrade)			
1 ADA Sign Package - Emergency Exit, Low Clearance, Preferred Seating			
1 Insulate Headliner			
1 Insulate Walls			
1 Undercoating			
1 Front End Alignment			
0 Front Splash Gaurds Are Included With Bus Door			
1 Splash Guards - Rear Set Only			
1 Roof Hatch	Power Vented <input type="checkbox"/>	Glass <input type="checkbox"/>	
1 Buzzer For Roof Hatch			
1 Driver Door 8" Stainless Steel Board			
1 Co-Pilot Door 8" Stainless Steel Board			
1 Safety Kit Includes: 5lb Fire Extinguisher, First Aid Kit, Triangle Reflectors			
1 Bodily Fluid Clean Up Kit			
1 Belt Cutter			
1 Dual Leaf Bus Door - Includes Keypad And Dual Grab Handles	Yellow Handles <input type="checkbox"/>	No Ford Modified Wiring <input type="checkbox"/>	
1 Warm Welcome Step Heater	Add 2nd Step Heater <input type="checkbox"/>		
1 Exterior Hooded Curb Light			
1 Replace Front Co-Pilot Bucket -Leaves OEM Rear Heater In Place	<input type="checkbox"/> With Parcel Rack	<input checked="" type="checkbox"/> With Flat Shelf	
1 Activate Daytime Running Lights			
1 Back Up Alarm Mounted In Tail Lamp			
1 Rear Amber L.E.D. Caution Lights Above Rear Doors	When To Flash:	When Rear Door Open	
2 11" X 7" Laminated Schematics			
1 Upfit Schematics			
1 Complete Parts Book			
1 White Drip Rail over Bus Door			
7 Freedman ABS Back			
1 Interior LED Hooded Stepwell Light			
1 AngelTrax 6 Camera System			
2 Notch Back Option for Double foldaways			
1 Air Valve Extenders (DRW) Set Of Two			

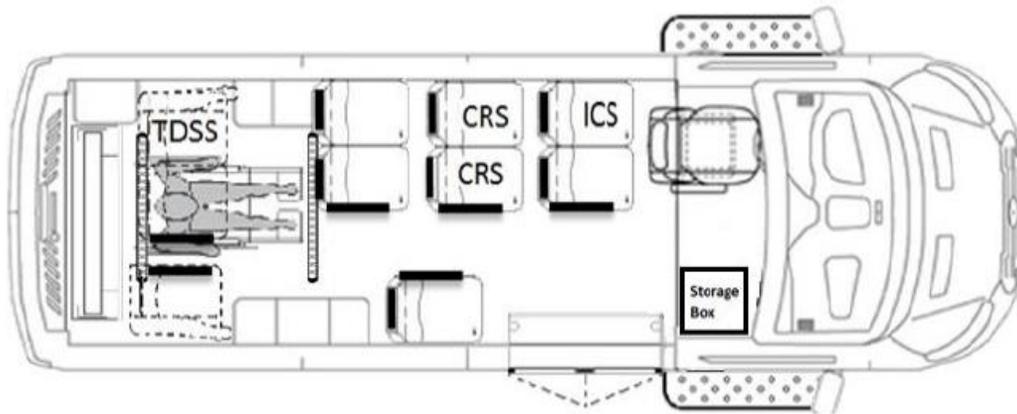
1	Locking Storage Box
1	Traction Chains Set Of Two
1	Safety Vest
2	Mylar Blankets
1	Jumper Cables
2	Wool Blankets
1	Interior Decals, No Smoking, Vehicle Clearance, Dial 911, Watch your Step, Wear your Seatbelt (SHIPPED LOOSE)
1	Exterior Decals, Stop at All Railroad Crossings, ISA, Caution Loading and Unloading, Caution Stand Clear For Lift Operations



**Class B**

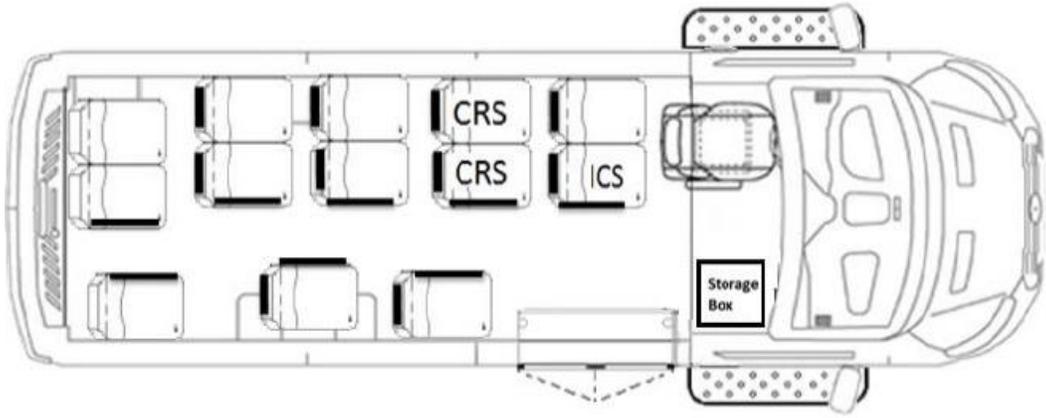
Ford Factory Ordered Transit Chassis				
	Description	Color	Chassis	Eng
	2021 T-350 High Roof 148EL Sliding Door GVWR 10,360# GVWR	Oxford White	U4X	3.5L Eco
1	1 Wheelchair On 148"-EL Wheel Base - High Roof Wagon Without Seats			
1	1 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option		<a href="#">Details</a>
2	2 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option	2	<a href="#">Details</a>
1	2 Passenger one ICS10 Feather Weight Mid Back - Forward Facing Fixed (No Belts) With Integrated Child Seat, 1 Recliner			<a href="#">Details</a>
1	1 Passenger Feather Weight Mid Back Fold Away (No Belts)	# CRS Option		<a href="#">Details</a>
1	2 Passenger Feather Weight Mid Back Fold Away (No Belts)	# CRS Option		<a href="#">Details</a>
10	Upgrade To Freedman Level 3.5 Seats, Per Seating Position	Enter Color:	Medallion	<a href="#">- Link</a>
7	Seat Top Mounted Grab Handle	Choose Type:	Black	
6	US Armrest, Black Molded, Available For Aisle Side Seat Only			
4	2pt Seat Belt Extender 8" <input type="checkbox"/> 12" <input checked="" type="checkbox"/> 18" <input type="checkbox"/>			
1	USR 1 Pass Fixed Under Seat Retract 75" 2pt	1 # Of Curbside Seats		# Of Street Side Seats
3	USR 2 Pass Fixed Under Seat Retract 75" 2pt	# Of Curbside Seats		3 # Of Street Side Seats
1	USR 1 Pass Fold Under Seat Retract 75" 2pt	1 # Of Curbside Seats		# Of Street Side Seats
1	USR 2 Pass Fold Under Seat Retract 75" 2pt	# Of Curbside Seats		1 # Of Street Side Seats
1	Flush Mounted Horizontal L-Tracks, Per Wheelchair Location			
1	Tiedown Web Loops (4-Per Wheelchair)			
1	T.D.S.S. L-TRACK Tiedown Storage System Under A Freedman Double Fold-Away Seat			
1	Upgrade To Braun Millennium 37" Lift	Add Hand Belt	<input checked="" type="checkbox"/>	
1	High Engine Idle Option For Intermotive Interlock System			
1	Marine Grade Plywood (Upgrade)			
1	ADA Sign Package - Emergency Exit, Low Clearance, Preferred Seating			
1	Insulate Headliner			
1	Insulate Walls			
1	Undercoating			
1	Front End Alignment			
0	Front Splash Gaurds Are Included With Bus Door			
1	Splash Guards - Rear Set Only			
1	Roof Hatch	Power Vented <input type="checkbox"/>	Glass <input type="checkbox"/>	
1	Buzzer For Roof Hatch			
1	Driver Door 8" Stainless Steel Board			
1	Co-Pilot Door 8" Stainless Steel Board			
1	Safety Kit Includes: 5lb Fire Extinguisher, First Aid Kit, Triangle Reflectors			
1	Bodily Fluid Clean Up Kit			
1	Belt Cutter			
1	Dual Leaf Bus Door - Includes Keypad And Dual Grab Handles	Yellow Handles <input type="checkbox"/>	No Ford Modified Wiring <input type="checkbox"/>	
1	Warm Welcome Step Heater	Add 2nd Step Heater <input type="checkbox"/>		
1	Exterior Hooded Curb Light			
1	Replace Front Co-Pilot Bucket -Leaves OEM Rear Heater In Place	<input type="checkbox"/> With Parcel Rack	<input checked="" type="checkbox"/> With Flat Shelf	
1	Activate Daytime Running Lights			
1	Back Up Alarm Mounted In Tail Lamp			
1	Rear Amber L.E.D. Caution Lights Above Rear Doors	When To Flash:	When Rear Door Open	
2	11" X 7" Laminated Schematics			
1	Upfit Schematics			
1	Complete Parts Book			
1	White Drip Rail over Bus Door			
9	Freedman ABS Back			
1	Interior LED Hooded Stepwell Light			
1	AngelTrax 6 Camera System			

1	Notch Back Option for Double foldaways
1	Air Valve Extenders (DRW) Set Of Two
1	Locking Storage Box
1	Traction Chains Set Of Two
1	Safety Vest
2	Mylar Blankets
1	Jumper Cables
2	Wool Blankets
1	Interior Decals, No Smoking, Vehicle Clearance, Dial 911, Watch your Step, Wear your Seatbelt (SHIPPED LOOSE)
1	Exterior Decals, Stop at All Railroad Crossings, ISA, Caution Loading and Unloading, Caution Stand Clear For Lift Operations



**Class C**

<b>Ford Factory Ordered Transit Chassis</b>				
	Description	Color	Chassis	Eng
	2021 T-350 High Roof 148EL Sliding Door GVWR 10,360# GVWR	Oxford White	U4X	3.5L EcoF
1	<b>148"-EL Wheel Base - High Roof Wagon Without Seats</b>			
3	1 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option		<a href="#">Details</a>
4	2 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option	2	<a href="#">Details</a>
1	2 Passenger with one ICS10 Feather Weight Mid Back - Forward Facing Fixed (No Belts) With Integrated Child Seat, 1 Recliner			<a href="#">Details</a>
13	Upgrade To Freedman Level 3.5 Seats, Per Seating Position	Enter Color:	Medallion	<a href="#">- Link</a>
10	Seat Top Mounted Grab Handle	Choose Type:	Black	
8	US Armrest, Black Molded, Available For Aisle Side Seat Only			
4	2pt Seat Belt Extender	8" <input type="checkbox"/>	12" <input type="checkbox"/>	18" <input checked="" type="checkbox"/>
3	USR 1 Pass Fixed Under Seat Retract 75" 2pt	3 # Of Curbside Seats		# Of Street Side Seats
5	USR 2 Pass Fixed Under Seat Retract 75" 2pt	# Of Curbside Seats	5	# Of Street Side Seats
1	High Engine Idle Option For Intermotive Interlock System			
1	Marine Grade Plywood (Upgrade)			
1	ADA Sign Package - Emergency Exit, Low Clearance, Preferred Seating			
1	Insulate Headliner			
1	Insulate Walls			
1	Undercoating			
1	Front End Alignment			
0	Front Splash Gaurds Are Included With Bus Door			
1	Splash Guards - Rear Set Only			
1	Roof Hatch	Power Vented <input type="checkbox"/>	Glass <input type="checkbox"/>	
1	Buzzer For Roof Hatch			
1	Driver Door 8" Stainless Steel Board			
1	Co-Pilot Door 8" Stainless Steel Board			
1	Safety Kit Includes: 5lb Fire Extinguisher, First Aid Kit, Triangle Reflectors			
1	Bodily Fluid Clean Up Kit			
1	Belt Cutter			
1	Dual Leaf Bus Door - Includes Keypad And Dual Grab Handles	Yellow Handles <input type="checkbox"/>	No Ford Modified Wiring <input type="checkbox"/>	
1	Warm Welcome Step Heater	Add 2nd Step Heater <input type="checkbox"/>		
1	Exterior Hooded Curb Light			
1	Replace Front Co-Pilot Bucket -Leaves OEM Rear Heater In Place	<input type="checkbox"/> With Parcel Rack	<input checked="" type="checkbox"/> With Flat Shelf	
1	Activate Daytime Running Lights			
1	Back Up Alarm Mounted In Tail Lamp			
2	11" X 7" Laminated Schematics			
1	Upfit Schematics			
1	Complete Parts Book			
1	White Drip Rail over Bus Door			
12	Freedman ABS Back			
1	Interior LED Hooded Stepwell Light			
1	AngelTrax 6 Camera System			
1	Air Valve Extenders (DRW) Set Of Two			
1	Locking Storage Box			
1	Traction Chains Set Of Two			
1	Safety Vest			
2	Mylar Blankets			
1	Jumper Cables			
2	Wool Blankets			
1	Interior Decals, No Smoking, Vehicle Clearance, Dial 911, Watch your Step, Wear your Seatbelt (SHIPPED LOOSE)			
1	Exterior Decals, Stop at All Railroad Crossings, Caution Loading and Unloading			

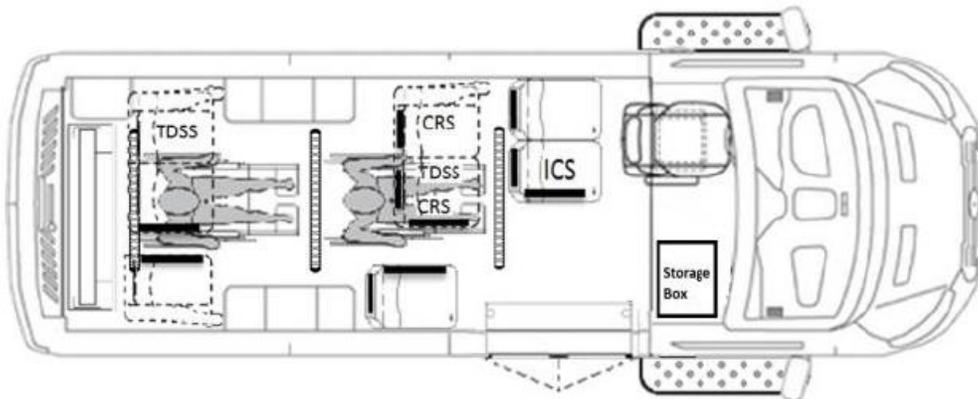


**Class D**

Ford Factory Ordered Transit Chassis				
Description		Color	Chassis	Eng
2021 T-350 High Roof 148EL Sliding Door GVWR 10,360# GVWR		Oxford White	U4X	3.5L EcoF
1	1 Wheelchair On 148"-EL Wheel Base - High Roof Wagon Without Seats			
1	1 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option		<a href="#">Details</a>
1	2 Passenger with one ICS10 Feather Weight Mid Back - Forward Facing Fixed (No Belts) With Integrated Child Seat, 1 Recliner			<a href="#">Details</a>
2	2 Passenger Feather Weight Mid Back Fold Away (No Belts)	# CRS Option	1	<a href="#">Details</a>
8	Upgrade To Freedman Level 3.5 Seats, Per Seating Position	Enter Color:	Medallion	<a href="#">- Link</a>
5	Seat Top Mounted Grab Handle	Choose Type:	Black	
5	US Armrest, Black Molded, Available For Aisle Side Seat Only			
4	2pt Seat Belt Extender 8" <input type="checkbox"/> 12" <input checked="" type="checkbox"/> 18" <input type="checkbox"/>			
1	USR 1 Pass Fixed Under Seat Retract 75" 2pt	1 # Of Curbside Seats		# Of Street Side Seats
1	USR 2 Pass Fixed Under Seat Retract 75" 2pt	# Of Curbside Seats	1	# Of Street Side Seats
1	USR 1 Pass Fold Under Seat Retract 75" 2pt	1 # Of Curbside Seats		# Of Street Side Seats
2	USR 2 Pass Fold Under Seat Retract 75" 2pt	# Of Curbside Seats	2	# Of Street Side Seats
1	Add Additional Wheelchair Location With QRT Deluxe Tiedowns, L-Pod Anchors, Lap & Non-Retractable Shoulder Belts			
2	Tiedown Web Loops (4-Per Wheelchair)			
2	T.D.S.S. L-TRACK Tiedown Storage System Under A Freedman Double Fold-Away Seat			
1	Upgrade To Braun Millennium 37" Lift	Add Hand Belt	<input checked="" type="checkbox"/>	
1	High Engine Idle Option For Intermotive Interlock System			
1	Marine Grade Plywood (Upgrade)			
1	ADA Sign Package - Emergency Exit, Low Clearance, Preferred Seating			
1	Insulate Headliner			
1	Insulate Walls			
1	Undercoating			
1	Front End Alignment			
0	Front Splash Gaurds Are Included With Bus Door			
1	Splash Guards - Rear Set Only			
1	Roof Hatch	Power Vented <input type="checkbox"/>	Glass <input type="checkbox"/>	
1	Buzzer For Roof Hatch			
1	Driver Door 8" Stainless Steel Board			
1	Co-Pilot Door 8" Stainless Steel Board			
1	Safety Kit Includes: 5lb Fire Extinguisher, First Aid Kit, Triangle Reflectors			
1	Bodily Fluid Clean Up Kit			
1	Belt Cutter			
1	Dual Leaf Bus Door - Includes Keypad And Dual Grab Handles	Yellow Handles <input type="checkbox"/>	No Ford Modified Wiring <input type="checkbox"/>	
1	Warm Welcome Step Heater	Add 2nd Step Heater <input type="checkbox"/>		
1	Exterior Hooded Curb Light			
1	Replace Front Co-Pilot Bucket -Leaves OEM Rear Heater In Place	<input type="checkbox"/> With Parcel Rack	<input checked="" type="checkbox"/> With Flat Shelf	
1	Activate Daytime Running Lights			
1	Back Up Alarm Mounted In Tail Lamp			
1	Rear Amber L.E.D. Caution Lights Above Rear Doors	When To Flash:	When Rear Door Open	
2	11" X 7" Laminated Schematics			
1	Upfit Schematics			
1	Complete Parts Book			
1	White Drip Rail over Bus Door			
7	Freedman ABS Back			
1	Interior LED Hooded Stepwell Light			
1	AngelTrax 6 Camera System			
2	Notch Back Option for Double foldaways			
1	Air Valve Extenders (DRW) Set Of Two			

1	Locking Storage Box
1	Traction Chains Set Of Two
1	Safety Vest
2	Mylar Blankets
1	Jumper Cables
2	Wool Blankets
1	Interior Decals, No Smoking, Vehicle Clearance, Dial 911, Watch your Step, Wear your Seatbelt (SHIPPED LOOSE)
1	Exterior Decals, Stop at All Railroad Crossings, ISA, Caution Loading and Unloading, Caution Stand Clear For Lift Operations

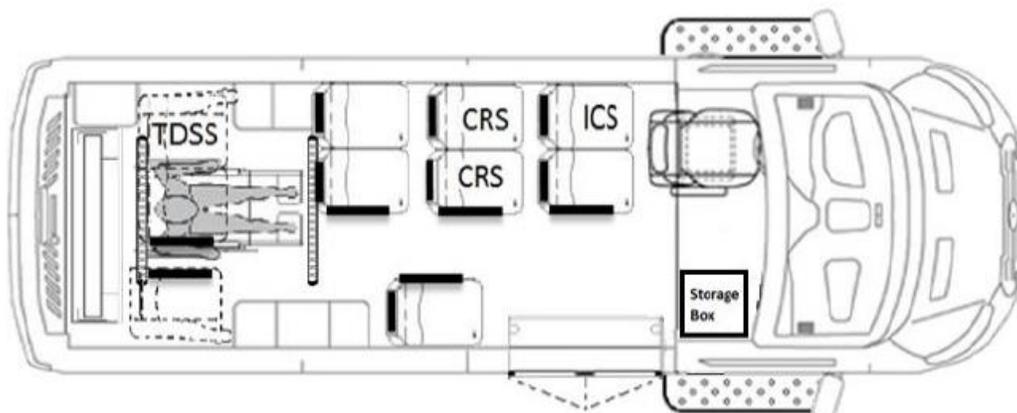
1	Front Destination Sign With Control Unit - Includes Front Close Out And Interior Headliner
1	Side Destination Sign - Curb Side Window Behind Sliding Door (Requires Front Destination Sign)
1	Clear Roof Mounted Strobe Light <input checked="" type="checkbox"/> Branch Guard
1	Public Address System With Interior Speaker And Handheld Mic <input checked="" type="checkbox"/> Exterior Speaker Additional Interior Speakers 1
1	OEM Front Overhead Shelf
1	Fair Box Provisions (Pole, Wire, 3pc Bracket)
0	Passenger Signaling System
8	Stop Button Slim
1	Sign
1	Flush Mount Control Unit
1	Cable Kit For Control Unit
1	Reset
1	\$820 Wireless
0	Pull Cord System
8	Pull Cord
8	Pull Cord Fitting
8	Pull Switch
2	Stop Request Chime
1	Sign
1	Reset



Class E

Ford Factory Ordered Transit Chassis				
Description		Color	Chassis	Eng
2021 T-350 High Roof 148EL Sliding Door GVWR 10,360# GVWR		Oxford White	U4X	3.5L Eco
1	1 Wheelchair On 148"-EL Wheel Base - High Roof Wagon Without Seats			
1	1 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option		<a href="#">Details</a>
2	2 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option	2	<a href="#">Details</a>
1	2 Passenger one ICS10 Feather Weight Mid Back - Forward Facing Fixed (No Belts) With Integrated Child Seat, 1 Recliner			<a href="#">Details</a>
1	1 Passenger Feather Weight Mid Back Fold Away (No Belts)	# CRS Option		<a href="#">Details</a>
1	2 Passenger Feather Weight Mid Back Fold Away (No Belts)	# CRS Option		<a href="#">Details</a>
10	Upgrade To Freedman Level 3.5 Seats, Per Seating Position	Enter Color:	Medallion	<a href="#">- Link</a>
7	Seat Top Mounted Grab Handle	Choose Type:	Black	
6	US Armrest, Black Molded, Available For Aisle Side Seat Only			
4	2pt Seat Belt Extender 8" <input type="checkbox"/> 12" <input checked="" type="checkbox"/> 18" <input type="checkbox"/>			
1	USR 1 Pass Fixed Under Seat Retract 75" 2pt	1 # Of Curbside Seats		# Of Street Side Seats
3	USR 2 Pass Fixed Under Seat Retract 75" 2pt	# Of Curbside Seats		3 # Of Street Side Seats
1	USR 1 Pass Fold Under Seat Retract 75" 2pt	1 # Of Curbside Seats		# Of Street Side Seats
1	USR 2 Pass Fold Under Seat Retract 75" 2pt	# Of Curbside Seats		1 # Of Street Side Seats
1	Flush Mounted Horizontal L-Tracks, Per Wheelchair Location			
1	Tiedown Web Loops (4-Per Wheelchair)			
1	T.D.S.S. L-TRACK Tiedown Storage System Under A Freedman Double Fold-Away Seat			
1	Upgrade To Braun Millennium 37" Lift	Add Hand Belt	<input checked="" type="checkbox"/>	
1	High Engine Idle Option For Intermotive Interlock System			
1	Marine Grade Plywood (Upgrade)			
1	ADA Sign Package - Emergency Exit, Low Clearance, Preferred Seating			
1	Insulate Headliner			
1	Insulate Walls			
1	Undercoating			
1	Front End Alignment			
0	Front Splash Gaurds Are Included With Bus Door			
1	Splash Guards - Rear Set Only			
1	Roof Hatch	Power Vented <input type="checkbox"/>	Glass <input type="checkbox"/>	
1	Buzzer For Roof Hatch			
1	Driver Door 8" Stainless Steel Board			
1	Co-Pilot Door 8" Stainless Steel Board			
1	Safety Kit Includes: 5lb Fire Extinguisher, First Aid Kit, Triangle Reflectors			
1	Bodily Fluid Clean Up Kit			
1	Belt Cutter			
1	Dual Leaf Bus Door - Includes Keypad And Dual Grab Handles	Yellow Handles <input type="checkbox"/>	No Ford Modified Wiring <input type="checkbox"/>	
1	Warm Welcome Step Heater	Add 2nd Step Heater <input type="checkbox"/>		
1	Exterior Hooded Curb Light			
1	Replace Front Co-Pilot Bucket -Leaves OEM Rear Heater In Place	<input type="checkbox"/> With Parcel Rack	<input checked="" type="checkbox"/> With Flat Shelf	
1	Activate Daytime Running Lights			
1	Back Up Alarm Mounted In Tail Lamp			
1	Rear Amber L.E.D. Caution Lights Above Rear Doors	When To Flash:	When Rear Door Open	
2	11" X 7" Laminated Schematics			
1	Upfit Schematics			
1	Complete Parts Book			
1	White Drip Rail over Bus Door			
9	Freedman ABS Back			
1	Interior LED Hooded Stepwell Light			
1	AngelTrax 6 Camera System			

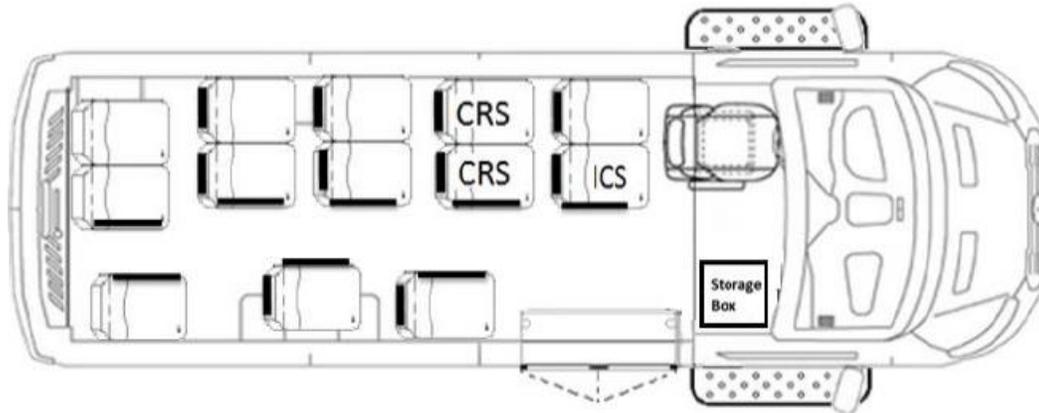
1	Notch Back Option for Double foldaways
1	Air Valve Extenders (DRW) Set Of Two
1	Locking Storage Box
1	Traction Chains Set Of Two
1	Safety Vest
2	Mylar Blankets
1	Jumper Cables
2	Wool Blankets
1	Interior Decals, No Smoking, Vehicle Clearance, Dial 911, Watch your Step, Wear your Seatbelt (SHIPPED LOOSE)
1	Exterior Decals, Stop at All Railroad Crossings, ISA, Caution Loading and Unloading, Caution Stand Clear For Lift Operations
1	Front Destination Sign With Control Unit - Includes Front Close Out And Interior Headliner
1	Side Destination Sign - Curb Side Window Behind Sliding Door (Requires Front Destination Sign)
1	Clear Roof Mounted Strobe Light <input checked="" type="checkbox"/> Branch Guard
1	Public Address System With Interior Speaker And Handheld Mic <input checked="" type="checkbox"/> Exterior Speaker <b>Additional Interior Speakers</b> 1
1	OEM Front Overhead Shelf
1	Fair Box Provisions (Pole, Wire, 3pc Bracket)
0	Passenger Signaling System
8	Stop Button Slim
1	Sign
1	Flush Mount Control Unit
1	Cable Kit For Control Unit
1	Reset
1	\$820 Wireless
0	Pull Cord System
8	Pull Cord
8	Pull Cord Fitting
8	Pull Switch
2	Stop Request Chime
1	Sign
1	Reset



**Class F**

Ford Factory Ordered Transit Chassis				
	Description	Color	Chassis	Eng
	2021 T-350 High Roof 148EL Sliding Door GVWR 10,360# GVWR	Oxford White	U4X	3.5L EcoF
1	148"-EL Wheel Base - High Roof Wagon Without Seats			
3	1 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option		<a href="#">Details</a>
4	2 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option	2	<a href="#">Details</a>
1	2 Passenger with one ICS10 Feather Weight Mid Back - Forward Facing Fixed (No Belts) With Integrated Child Seat, 1 Recliner			<a href="#">Details</a>
13	Upgrade To Freedman Level 3.5 Seats, Per Seating Position	Enter Color:	Medallion	<a href="#">- Link</a>
10	Seat Top Mounted Grab Handle	Choose Type:	Black	
8	US Armrest, Black Molded, Available For Aisle Side Seat Only			
4	2pt Seat Belt Extender 8" <input type="checkbox"/> 12" <input checked="" type="checkbox"/> 18" <input type="checkbox"/>			
3	USR 1 Pass Fixed Under Seat Retract 75" 2pt	3 # Of Curbside Seats		# Of Street Side Seats
5	USR 2 Pass Fixed Under Seat Retract 75" 2pt	# Of Curbside Seats	5	# Of Street Side Seats
1	High Engine Idle Option For Intermotive Interlock System			
1	Marine Grade Plywood (Upgrade)			
1	ADA Sign Package - Emergency Exit, Low Clearance, Preferred Seating			
1	Insulate Headliner			
1	Insulate Walls			
1	Undercoating			
1	Front End Alignment			
0	Front Splash Gaurds Are Included With Bus Door			
1	Splash Guards - Rear Set Only			
1	Roof Hatch	Power Vented <input type="checkbox"/>	Glass <input type="checkbox"/>	
1	Buzzer For Roof Hatch			
1	Driver Door 8" Stainless Steel Board			
1	Co-Pilot Door 8" Stainless Steel Board			
1	Safety Kit Includes: 5lb Fire Extinguisher, First Aid Kit, Triangle Reflectors			
1	Bodily Fluid Clean Up Kit			
1	Belt Cutter			
1	Dual Leaf Bus Door - Includes Keypad And Dual Grab Handles	Yellow Handles <input type="checkbox"/>	No Ford Modified Wiring <input type="checkbox"/>	
1	Warm Welcome Step Heater	Add 2nd Step Heater <input type="checkbox"/>		
1	Exterior Hooded Curb Light			
1	Replace Front Co-Pilot Bucket -Leaves OEM Rear Heater In Place	<input type="checkbox"/> With Parcel Rack	<input checked="" type="checkbox"/> With Flat Shelf	
1	Activate Daytime Running Lights			
1	Back Up Alarm Mounted In Tail Lamp			
2	11" X 7" Laminated Schematics			
1	Upfit Schematics			
1	Complete Parts Book			
1	White Drip Rail over Bus Door			
12	Freedman ABS Back			
1	Interior LED Hooded Stepwell Light			
1	AngelTrax 6 Camera System			
1	Air Valve Extenders (DRW) Set Of Two			
1	Locking Storage Box			
1	Traction Chains Set Of Two			
1	Safety Vest			
2	Mylar Blankets			
1	Jumper Cables			
2	Wool Blankets			
1	Interior Decals, No Smoking, Vehicle Clearance, Dial 911, Watch your Step, Wear your Seatbelt (SHIPPED LOOSE)			
1	Exterior Decals, Stop at All Railroad Crossings, Caution Loading and Unloading			

1	Front Destination Sign With Control Unit - Includes Front Close Out And Interior Headliner			
1	Side Destination Sign - Curb Side Window Behind Sliding Door (Requires Front Destination Sign)			
1	Clear Roof Mounted Strobe Light	<input checked="" type="checkbox"/>	Branch Guard	
1	Public Address System With Interior Speaker And Handheld Mic	<input checked="" type="checkbox"/>	Exterior Speaker	Additional Interior Speakers 1
1	OEM Front Overhead Shelf			
1	Fair Box Provisions (Pole, Wire, 3pc Bracket)			
0	Passenger Signaling System			
8	Stop Button Slim			
1	Sign			
1	Flush Mount Control Unit			
1	Cable Kit For Control Unit			
1	Reset			
1	\$820 Wireless			
0	Pull Cord System			
8	Pull Cord			
8	Pull Cord Fitting			
8	Pull Switch			
2	Stop Request Chime			
1	Sign			
1	Reset			

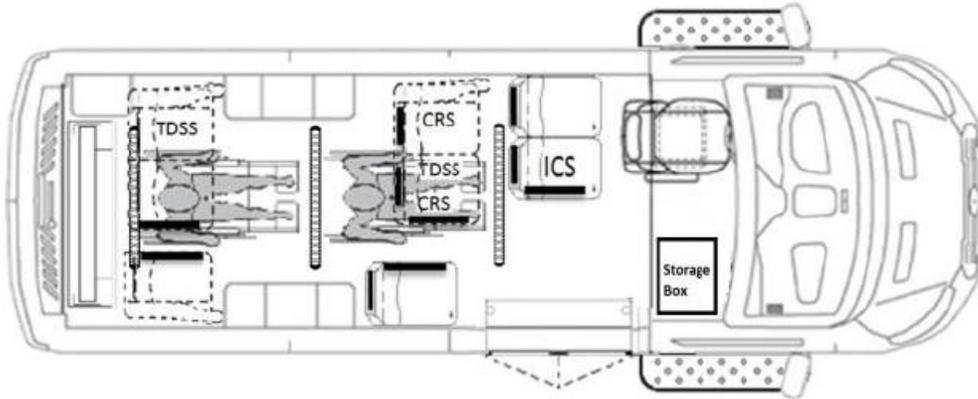


## Class G

Ford Factory Ordered Transit Chassis				
	Description	Color	Chassis	Eng
	2021 T-350 High Roof 148EL Sliding Door GVWR 10,360# GVWR	Oxford White	U4X	3.5L EcoF
1	1 Wheelchair On 148"-EL Wheel Base - High Roof Wagon Without Seats			
1	1 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option		<a href="#">Details</a>
1	2 Passenger with one ICS10 Feather Weight Mid Back - Forward Facing Fixed (No Belts) With Integrated Child Seat, 1 Recliner			<a href="#">Details</a>
2	2 Passenger Feather Weight Mid Back Fold Away (No Belts)	# CRS Option	1	<a href="#">Details</a>
8	Upgrade To Freedman Level 3.5 Seats, Per Seating Position	Enter Color:	Medallion	<a href="#">- Link</a>
5	Seat Top Mounted Grab Handle	Choose Type:	Black	
5	US Armrest, Black Molded, Available For Aisle Side Seat Only			
4	2pt Seat Belt Extender    8" <input type="checkbox"/> 12" <input checked="" type="checkbox"/> 18" <input type="checkbox"/>			
1	USR 1 Pass Fixed Under Seat Retract 75" 2pt	1 # Of Curbside Seats		# Of Street Side Seats
1	USR 2 Pass Fixed Under Seat Retract 75" 2pt	# Of Curbside Seats	1	# Of Street Side Seats
1	USR 1 Pass Fold Under Seat Retract 75" 2pt	1 # Of Curbside Seats		# Of Street Side Seats
2	USR 2 Pass Fold Under Seat Retract 75" 2pt	# Of Curbside Seats	2	# Of Street Side Seats
1	Add Additional Wheelchair Location With QRT Deluxe Tiedowns, L-Pod Anchors, Lap & Non-Retractable Shoulder Belts			
2	Tiedown Web Loops (4-Per Wheelchair)			
2	T.D.S.S. L-TRACK Tiedown Storage System Under A Freedman Double Fold-Away Seat			
1	Upgrade To Braun Millennium 37" Lift	Add Hand Belt	<input checked="" type="checkbox"/>	
1	High Engine Idle Option For Intermotive Interlock System			
1	Marine Grade Plywood (Upgrade)			
1	ADA Sign Package - Emergency Exit, Low Clearance, Preferred Seating			
1	Insulate Headliner			
1	Insulate Walls			
1	Undercoating			
1	Front End Alignment			
0	Front Splash Gaurds Are Included With Bus Door			
1	Splash Guards - Rear Set Only			
1	Roof Hatch	Power Vented <input type="checkbox"/>	Glass <input type="checkbox"/>	
1	Buzzer For Roof Hatch			
1	Driver Door 8" Stainless Steel Board			
1	Co-Pilot Door 8" Stainless Steel Board			
1	Safety Kit Includes: 5lb Fire Extinguisher, First Aid Kit, Triangle Reflectors			
1	Bodily Fluid Clean Up Kit			
1	Belt Cutter			
1	Dual Leaf Bus Door - Includes Keypad And Dual Grab Handles	Yellow Handles <input type="checkbox"/>	No Ford Modified Wiring <input type="checkbox"/>	
1	Warm Welcome Step Heater	Add 2nd Step Heater <input type="checkbox"/>		
1	Exterior Hooded Curb Light			
1	Replace Front Co-Pilot Bucket -Leaves OEM Rear Heater In Place	<input type="checkbox"/> With Parcel Rack	<input checked="" type="checkbox"/> With Flat Shelf	
1	Activate Daytime Running Lights			
1	Back Up Alarm Mounted In Tail Lamp			
1	Rear Amber L.E.D. Caution Lights Above Rear Doors	When To Flash:	When Rear Door Open	
2	11" X 7" Laminated Schematics			
1	Upfit Schematics			
1	Complete Parts Book			
1	White Drip Rail over Bus Door			
7	Freedman ABS Back			
1	Interior LED Hooded Stepwell Light			
1	AngelTrax 6 Camera System			
2	Notch Back Option for Double foldaways			
1	Air Valve Extenders (DRW) Set Of Two			

1	Locking Storage Box
1	Traction Chains Set Of Two
1	Safety Vest
2	Mylar Blankets
1	Jumper Cables
2	Wool Blankets
1	Interior Decals, No Smoking, Vehicle Clearance, Dial 911, Watch your Step, Wear your Seatbelt (SHIPPED LOOSE)
1	Exterior Decals, Stop at All Railroad Crossings, ISA, Caution Loading and Unloading, Caution Stand Clear For Lift Operations

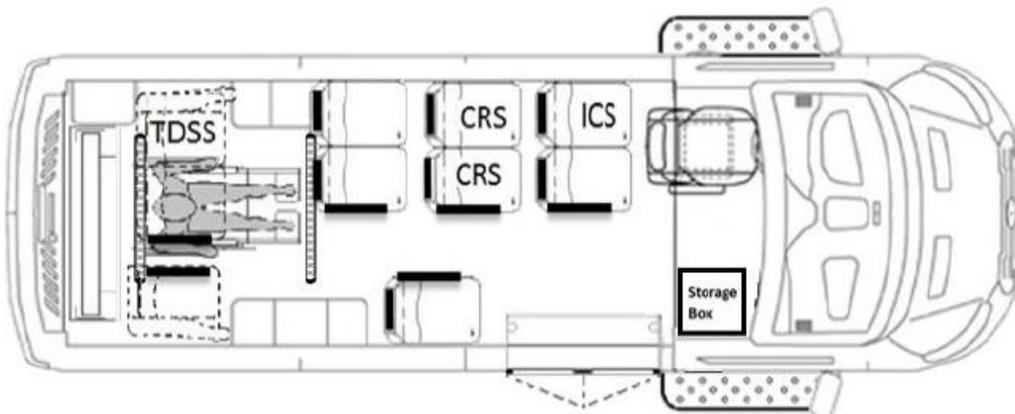
1	Front Destination Sign With Control Unit - Includes Front Close Out And Interior Headliner
1	Side Destination Sign - Curb Side Window Behind Sliding Door (Requires Front Destination Sign)
1	Clear Roof Mounted Strobe Light <input checked="" type="checkbox"/> Branch Guard
1	Public Address System With Interior Speaker And Handheld Mic <input checked="" type="checkbox"/> Exterior Speaker Additional Interior Speakers 1
1	OEM Front Overhead Shelf
1	Fair Box Provisions (Pole, Wire, 3pc Bracket)
0	Passenger Signaling System
8	Stop Button Slim
1	Sign
1	Flush Mount Control Unit
1	Cable Kit For Control Unit
1	Reset
1	\$820 Wireless
0	Pull Cord System
8	Pull Cord
8	Pull Cord Fitting
8	Pull Switch
2	Stop Request Chime
1	Sign
1	Reset



Class F

Ford Factory Ordered Transit Chassis				
Description		Color	Chassis	Eng
2021 T-350 High Roof 148EL Sliding Door GVWR 10,360# GVWR		Oxford White	U4X	3.5L Eco
1	1 Wheelchair On 148"-EL Wheel Base - High Roof Wagon Without Seats			
1	1 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option		<a href="#">Details</a>
2	2 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option	2	<a href="#">Details</a>
1	2 Passenger one ICS10 Feather Weight Mid Back - Forward Facing Fixed (No Belts) With Integrated Child Seat, 1 Recliner			<a href="#">Details</a>
1	1 Passenger Feather Weight Mid Back Fold Away (No Belts)	# CRS Option		<a href="#">Details</a>
1	2 Passenger Feather Weight Mid Back Fold Away (No Belts)	# CRS Option		<a href="#">Details</a>
10	Upgrade To Freedman Level 3.5 Seats, Per Seating Position	Enter Color:	Medallion	<a href="#">- Link</a>
7	Seat Top Mounted Grab Handle	Choose Type:	Black	
6	US Armrest, Black Molded, Available For Aisle Side Seat Only			
4	2pt Seat Belt Extender 8" <input type="checkbox"/> 12" <input checked="" type="checkbox"/> 18" <input type="checkbox"/>			
1	USR 1 Pass Fixed Under Seat Retract 75" 2pt	1 # Of Curbside Seats		# Of Street Side Seats
3	USR 2 Pass Fixed Under Seat Retract 75" 2pt	# Of Curbside Seats		3 # Of Street Side Seats
1	USR 1 Pass Fold Under Seat Retract 75" 2pt	1 # Of Curbside Seats		# Of Street Side Seats
1	USR 2 Pass Fold Under Seat Retract 75" 2pt	# Of Curbside Seats		1 # Of Street Side Seats
1	Flush Mounted Horizontal L-Tracks, Per Wheelchair Location			
1	Tiedown Web Loops (4-Per Wheelchair)			
1	T.D.S.S. L-TRACK Tiedown Storage System Under A Freedman Double Fold-Away Seat			
1	Upgrade To Braun Millennium 37" Lift	Add Hand Belt	<input checked="" type="checkbox"/>	
1	High Engine Idle Option For Intermotive Interlock System			
1	Marine Grade Plywood (Upgrade)			
1	ADA Sign Package - Emergency Exit, Low Clearance, Preferred Seating			
1	Insulate Headliner			
1	Insulate Walls			
1	Undercoating			
1	Front End Alignment			
0	Front Splash Gaurds Are Included With Bus Door			
1	Splash Guards - Rear Set Only			
1	Roof Hatch	Power Vented <input type="checkbox"/>	Glass <input type="checkbox"/>	
1	Buzzer For Roof Hatch			
1	Driver Door 8" Stainless Steel Board			
1	Co-Pilot Door 8" Stainless Steel Board			
1	Safety Kit Includes: 5lb Fire Extinguisher, First Aid Kit, Triangle Reflectors			
1	Bodily Fluid Clean Up Kit			
1	Belt Cutter			
1	Dual Leaf Bus Door - Includes Keypad And Dual Grab Handles	Yellow Handles <input type="checkbox"/>	No Ford Modified Wiring <input type="checkbox"/>	
1	Warm Welcome Step Heater	Add 2nd Step Heater <input type="checkbox"/>		
1	Exterior Hooded Curb Light			
1	Replace Front Co-Pilot Bucket -Leaves OEM Rear Heater In Place	<input type="checkbox"/> With Parcel Rack	<input checked="" type="checkbox"/> With Flat Shelf	
1	Activate Daytime Running Lights			
1	Back Up Alarm Mounted In Tail Lamp			
1	Rear Amber L.E.D. Caution Lights Above Rear Doors	When To Flash:	When Rear Door Open	
2	11" X 7" Laminated Schematics			
1	Upfit Schematics			
1	Complete Parts Book			
1	White Drip Rail over Bus Door			
9	Freedman ABS Back			
1	Interior LED Hooded Stepwell Light			
1	AngelTrax 6 Camera System			

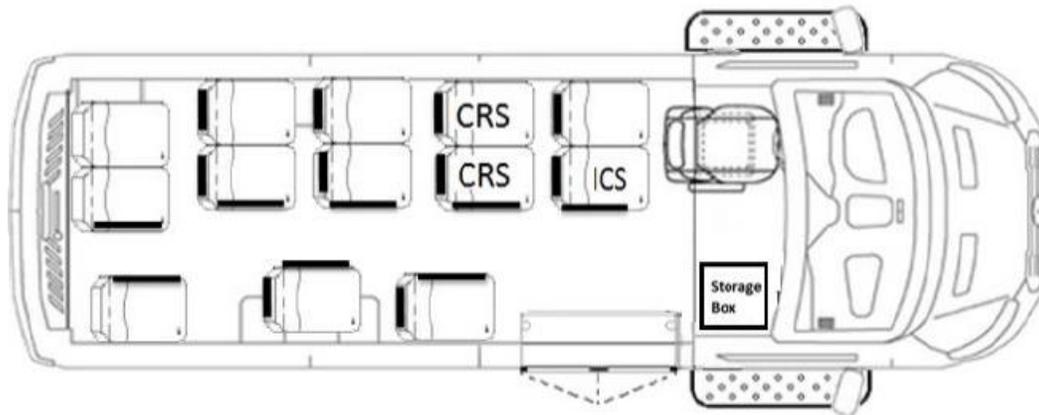
1	Notch Back Option for Double foldaways
1	Air Valve Extenders (DRW) Set Of Two
1	Locking Storage Box
1	Traction Chains Set Of Two
1	Safety Vest
2	Mylar Blankets
1	Jumper Cables
2	Wool Blankets
1	Interior Decals, No Smoking, Vehicle Clearance, Dial 911, Watch your Step, Wear your Seatbelt (SHIPPED LOOSE)
1	Exterior Decals, Stop at All Railroad Crossings, ISA, Caution Loading and Unloading, Caution Stand Clear For Lift Operations
1	Front Destination Sign With Control Unit - Includes Front Close Out And Interior Headliner
1	Side Destination Sign - Curb Side Window Behind Sliding Door (Requires Front Destination Sign)
1	Clear Roof Mounted Strobe Light <input checked="" type="checkbox"/> Branch Guard
1	Public Address System With Interior Speaker And Handheld Mic <input checked="" type="checkbox"/> Exterior Speaker <b>Additional Interior Speakers</b> 1
1	OEM Front Overhead Shelf
1	Fair Box Provisions (Pole, Wire, 3pc Bracket)
0	Passenger Signaling System
8	Stop Button Slim
1	Sign
1	Flush Mount Control Unit
1	Cable Kit For Control Unit
1	Reset
1	\$820 Wireless
0	Pull Cord System
8	Pull Cord
8	Pull Cord Fitting
8	Pull Switch
2	Stop Request Chime
1	Sign
1	Reset



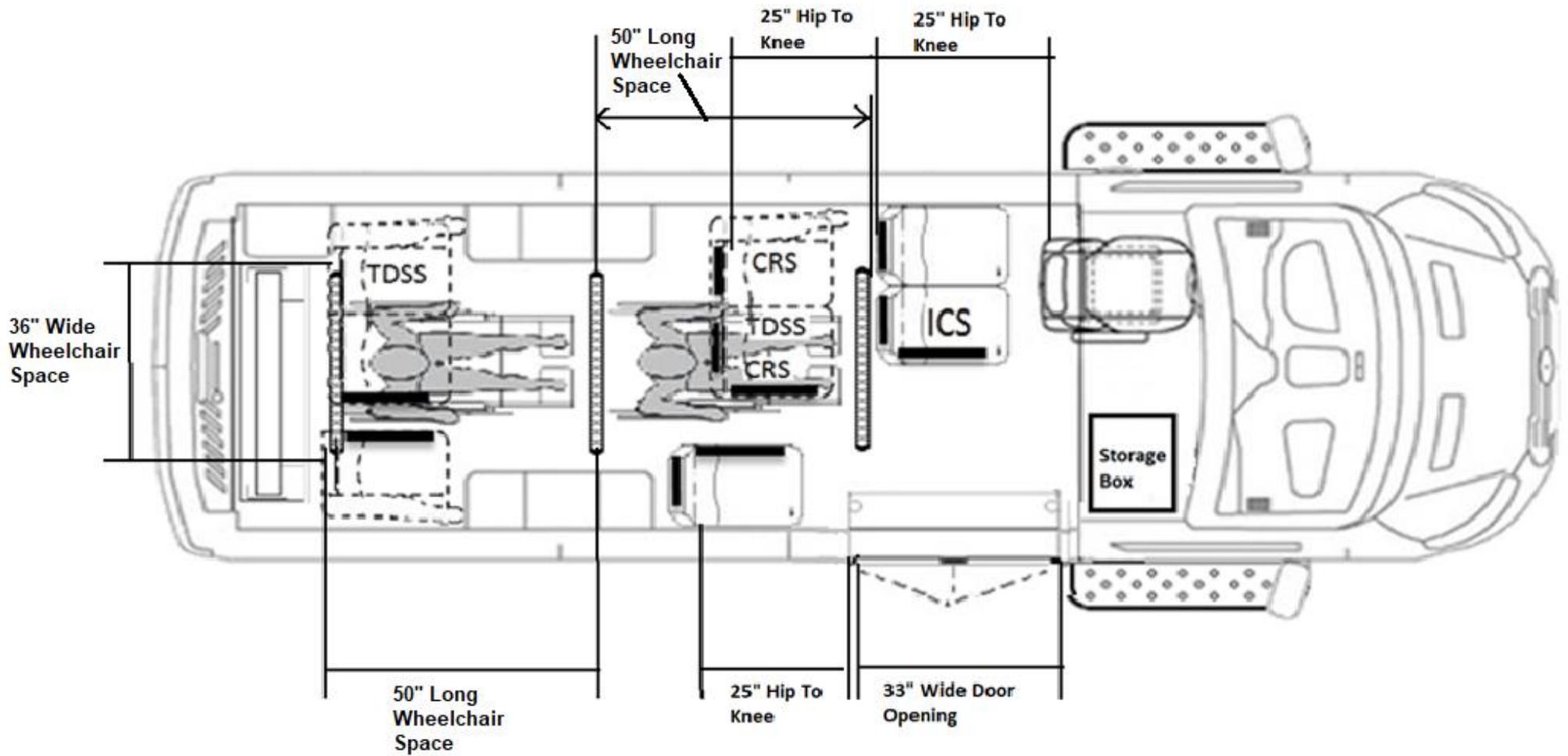
**Class I**

<b>Ford Factory Ordered Transit Chassis</b>				
	Description	Color	Chassis	Eng
	2021 T-350 High Roof 148EL Sliding Door GVWR 10,360# GVWR	Oxford White	U4X	3.5L EcoF
1	<b>148"-EL Wheel Base - High Roof Wagon Without Seats</b>			
3	1 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option		<a href="#">Details</a>
4	2 Passenger Feather Weight Mid Back - Forward Facing Fixed (No Belts) Recliner	# CRS Option	2	<a href="#">Details</a>
1	2 Passenger with one ICS10 Feather Weight Mid Back - Forward Facing Fixed (No Belts) With Integrated Child Seat, 1 Recliner			<a href="#">Details</a>
13	Upgrade To Freedman Level 3.5 Seats, Per Seating Position	Enter Color:	Medallion	<a href="#">- Link</a>
10	Seat Top Mounted Grab Handle	Choose Type:	Black	
8	US Armrest, Black Molded, Available For Aisle Side Seat Only			
4	2pt Seat Belt Extender 8" <input type="checkbox"/> 12" <input checked="" type="checkbox"/> 18" <input type="checkbox"/>			
3	USR 1 Pass Fixed Under Seat Retract 75" 2pt	3 # Of Curbside Seats		# Of Street Side Seats
5	USR 2 Pass Fixed Under Seat Retract 75" 2pt	# Of Curbside Seats	5	# Of Street Side Seats
1	High Engine Idle Option For Intermotive Interlock System			
1	Marine Grade Plywood (Upgrade)			
1	ADA Sign Package - Emergency Exit, Low Clearance, Preferred Seating			
1	Insulate Headliner			
1	Insulate Walls			
1	Undercoating			
1	Front End Alignment			
0	Front Splash Gaurds Are Included With Bus Door			
1	Splash Guards - Rear Set Only			
1	Roof Hatch	Power Vented <input type="checkbox"/>	Glass <input type="checkbox"/>	
1	Buzzer For Roof Hatch			
1	Driver Door 8" Stainless Steel Board			
1	Co-Pilot Door 8" Stainless Steel Board			
1	Safety Kit Includes: 5lb Fire Extinguisher, First Aid Kit, Triangle Reflectors			
1	Bodily Fluid Clean Up Kit			
1	Belt Cutter			
1	Dual Leaf Bus Door - Includes Keypad And Dual Grab Handles	Yellow Handles <input type="checkbox"/>	No Ford Modified Wiring <input type="checkbox"/>	
1	Warm Welcome Step Heater	Add 2nd Step Heater <input type="checkbox"/>		
1	Exterior Hooded Curb Light			
1	Replace Front Co-Pilot Bucket -Leaves OEM Rear Heater In Place	<input type="checkbox"/> With Parcel Rack	<input checked="" type="checkbox"/> With Flat Shelf	
1	Activate Daytime Running Lights			
1	Back Up Alarm Mounted In Tail Lamp			
2	11" X 7" Laminated Schematics			
1	Upfit Schematics			
1	Complete Parts Book			
1	White Drip Rail over Bus Door			
12	Freedman ABS Back			
1	Interior LED Hooded Stepwell Light			
1	AngelTrax 6 Camera System			
1	Air Valve Extenders (DRW) Set Of Two			
1	Locking Storage Box			
1	Traction Chains Set Of Two			
1	Safety Vest			
2	Mylar Blankets			
1	Jumper Cables			
2	Wool Blankets			
1	Interior Decals, No Smoking, Vehicle Clearance, Dial 911, Watch your Step, Wear your Seatbelt (SHIPPED LOOSE)			
1	Exterior Decals, Stop at All Railroad Crossings, Caution Loading and Unloading			

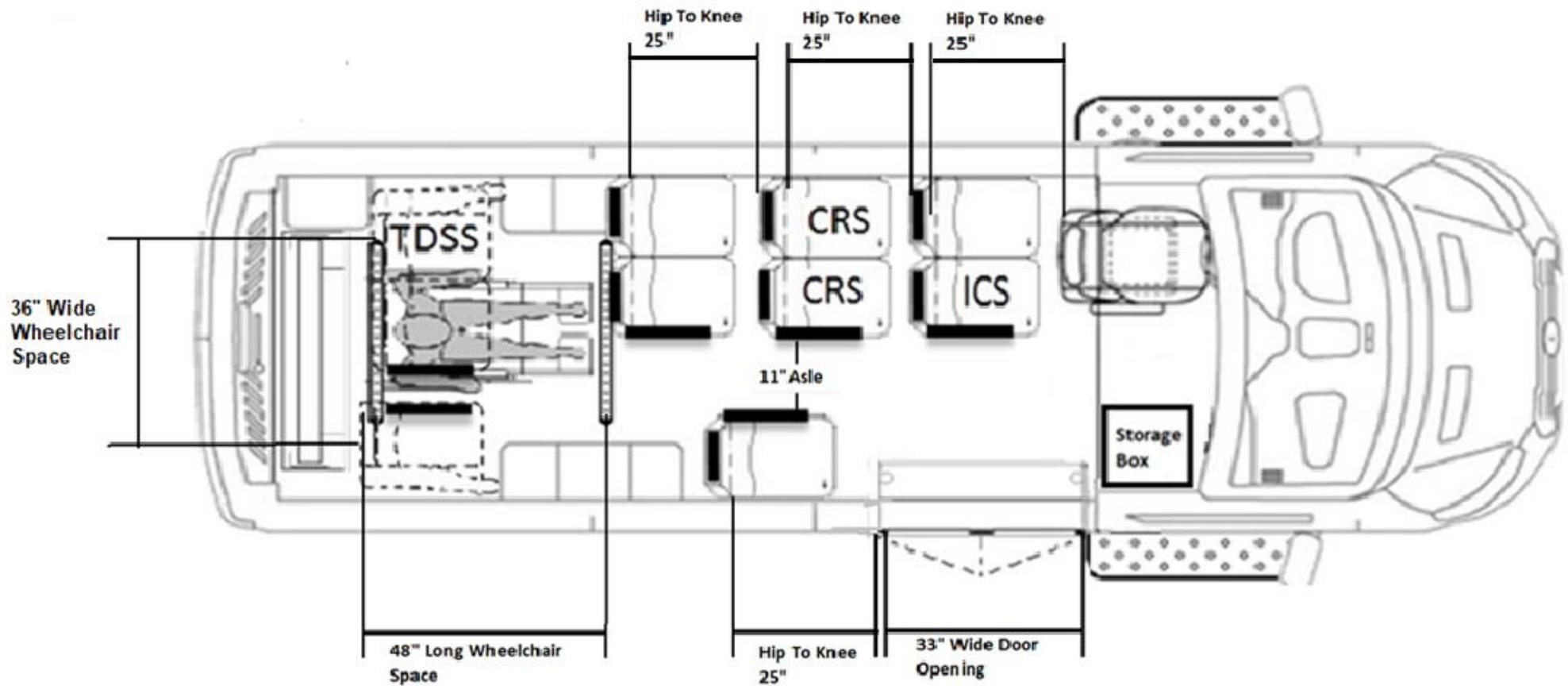
1	Front Destination Sign With Control Unit - Includes Front Close Out And Interior Headliner			
1	Side Destination Sign - Curb Side Window Behind Sliding Door (Requires Front Destination Sign)			
1	Clear Roof Mounted Strobe Light	<input checked="" type="checkbox"/>	Branch Guard	
1	Public Address System With Interior Speaker And Handheld Mic	<input checked="" type="checkbox"/>	Exterior Speaker	Additional Interior Speakers 1
1	OEM Front Overhead Shelf			
1	Fair Box Provisions (Pole, Wire, 3pc Bracket)			
0	Passenger Signaling System			
8	Stop Button Slim			
1	Sign			
1	Flush Mount Control Unit			
1	Cable Kit For Control Unit			
1	Reset			
1	\$820 Wireless			
0	Pull Cord System			
8	Pull Cord			
8	Pull Cord Fitting			
8	Pull Switch			
2	Stop Request Chime			
1	Sign			
1	Reset			



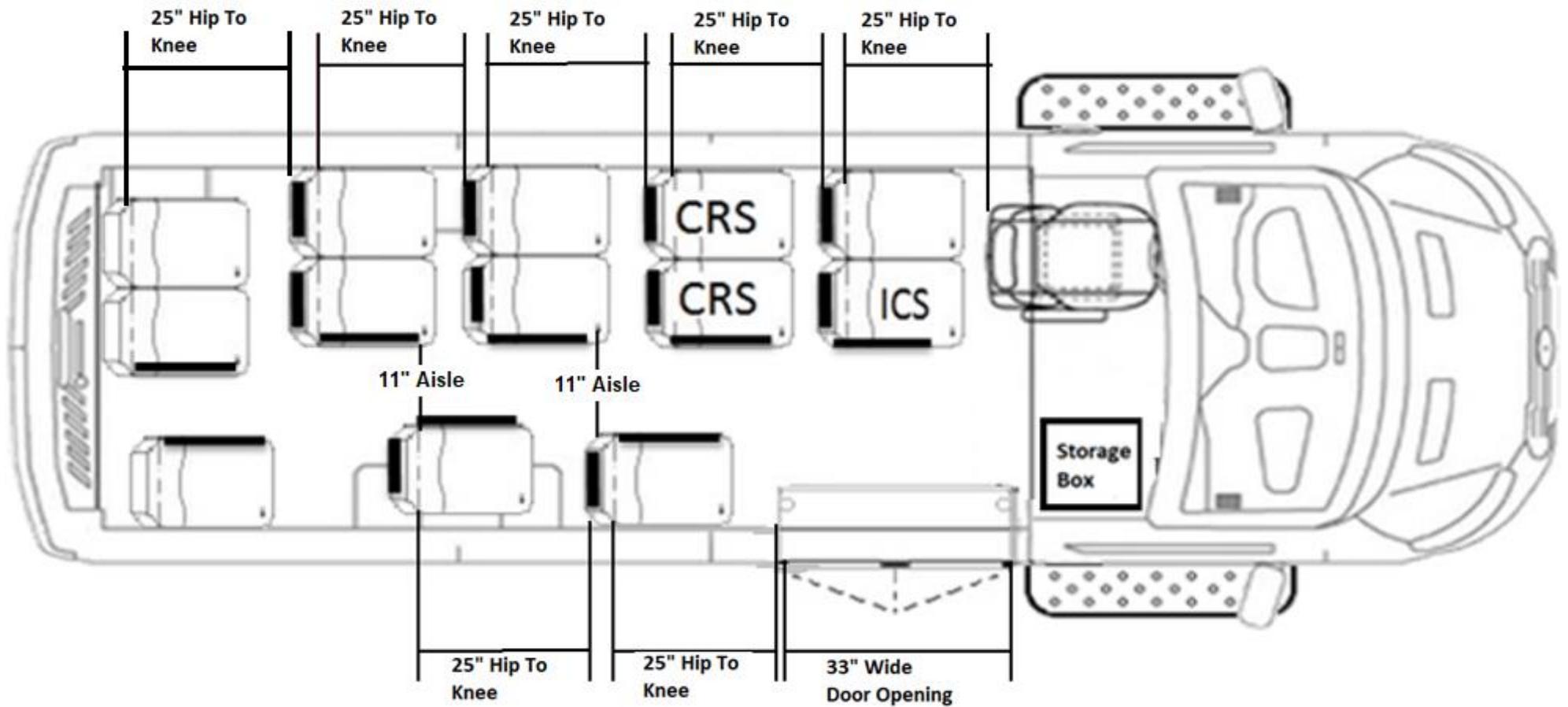
# Ford Transit 350, High Roof, 22' Long, 148" WB, DRW



# Ford Transit 350, High Roof, 22' Long, 148" WB, DRW



# Ford Transit 350, High Roof, 22' Long, 148" WB, DRW





# WEIGHT ANALYSIS WORKSHEET

(4-CORNER)

Enduser: West Virginia Class A	Date: 3/8/2021
VIN: 1FDVU4XG3LKB53559	Performed By: Jason Huzing

	Max # Of Ambulatory Passengers	Max # Of Wheelchairs							
	9								
OEM Wheelbase	OEM GVWR	OEM FRT GAWR	OEM RR GAWR	Fuel Type	Engine Type	Payload Capacity	Unmodified Curb Weight		
148"-EL	10360	4130	6725	Gas	3.5L Eco	3254	3093	3772	6865
							Front	Rear	Total

	Lft-Frt (lbs)	Rt-Frt (lbs)	Lft-Rr (lbs)	Rt-Rr (lbs)	Total (lbs)
ACTUAL COMPLETED WEIGHT OF VEHICLE (UVW)	1350.14	1350.14	2273.92	2131.80	7106.00
WEIGHT OF THE OCCUPANTS (lbs)	310.50	310.50	378.00	351.00	1350.00
WEIGHT OF Full Tank Of Gas	44.10	33.08	45.68	34.65	157.50
ADJUSTED 4 CORNER WEIGHT	1704.74	1693.72	2697.60	2517.45	8613.50

**TOTAL FRONT**    3398.46                      731.55                      **TOTAL REAR**    5215.05                      1509.96  
 IS THE FRONT GAWR OVER    **NO**                      IS THE REAR GAWR OVER    **NO**

<b>PASS/FAIL Analysis</b>		Is Lft-Frt/2 Exceeded?	Is Rt-Frt/2 Exceeded?
Front GAWR (lbs.)	4130      divided by 2=	2065.00	<b>NO</b> <b>NO</b>
Rear GAWR (lbs.)	6725      divided by 2=	3362.50	<b>NO</b> <b>NO</b>
GVWR (lbs.)	10360	LOADED WEIGHT (lbs.)	<b>8613.50</b> 1746.50
		Is GVWR Exceeded?	<b>NO</b>
Maximum UVW from Tables A & B of the Incomplete Vehicle Manual (IVM) is		N/A lbs..	
(NOTE: UVW does not apply to certification of vehicles with a GVWR above 10,000 lbs.)			
The actual completed weight (UVW) of this vehicle is		7106.00 lbs.	Is Maximum UVW Exceeded?
		<b>NO</b>	

**DEFINITIONS**

"UVW" - Completed weight of the vehicle with maximum capacity of all fluids necessary for operation of the vehicle, but without cargo, occupants or accessories that are normally removed when the vehicle is not in use.

"GAWR" and "GVWR" are found on the label affixed to the cover of the Incomplete Vehicle Manual (IVM).

"LOADED VEHICLE WEIGHT" - Completed weight of the vehicle with maximum capacities of all fluids necessary for operation of the vehicle plus 150 lbs. (or 70 kg.) for each designated seating position and appropriate allowance for cargo. Vehicles with tanks for water and/or LP gas must also account for the weight of these fluids in the cargo calculations.

# WEIGHT ANALYSIS WORKSHEET

(4-CORNER)

Enduser: West Virginia Class B	Date: 3/8/2021
VIN: 1FDVU4XG3LKB53559	Performed By: Jason Huizing

	Max # Of Ambulatory Passengers	Max # Of Wheelchairs							
	11								
OEM Wheelbase	OEM GVWR	OEM FRT GAWR	OEM RR GAWR	Fuel Type	Engine Type	Payload Capacity	Unmodified Curb Weight		
148"-EL	10360	4130	6725	Gas	3.5L Eco	3096	3159	3789	6948
							Front	Rear	Total

	Lft-Frt (lbs)	Rt-Frt (lbs)	Lft-Rr (lbs)	Rt-Rr (lbs)	Total (lbs)
ACTUAL COMPLETED WEIGHT OF VEHICLE (UVW)	1380.16	1380.16	2324.48	2179.20	7264.00
WEIGHT OF THE OCCUPANTS (lbs)	379.50	379.50	462.00	429.00	1650.00
WEIGHT OF Full Tank Of Gas	44.10	33.08	45.68	34.65	157.50
ADJUSTED 4 CORNER WEIGHT	1803.76	1792.74	2832.16	2642.85	9071.50

**TOTAL FRONT**    3596.50                      533.51                      **TOTAL REAR**    5475.01                      1250.00  
 IS THE FRONT GAWR OVER    **NO**                      IS THE REAR GAWR OVER    **NO**

<b>PASS/FAIL Analysis</b>		Is Lft-Frt/2 Exceeded?	Is Rt-Frt/2 Exceeded?
Front GAWR (lbs.)	4130	divided by 2=	2065.00
		<b>NO</b>	<b>NO</b>
Rear GAWR (lbs.)	6725	divided by 2=	3362.50
		<b>NO</b>	<b>NO</b>
GVWR (lbs.)	10360	LOADED WEIGHT (lbs.)	9071.50
			1288.50
		Is GVWR Exceeded?	<b>NO</b>
Maximum UVW from Tables A & B of the Incomplete Vehicle Manual (IVM) is		N/A lbs..	
(NOTE: UVW does not apply to certification of vehicles with a GVWR above 10,000 lbs.)			
The actual completed weight (UVW) of this vehicle is	7264.00	Is Maximum UVW Exceeded?	<b>NO</b>

**DEFINITIONS**

"UVW" - Completed weight of the vehicle with maximum capacity of all fluids necessary for operation of the vehicle, but without cargo, occupants or accessories that are normally removed when the vehicle is not in use.

"GAWR" and "GVWR" are found on the label affixed to the cover of the Incomplete Vehicle Manual (IVM).

"LOADED VEHICLE WEIGHT" - Completed weight of the vehicle with maximum capacities of all fluids necessary for operation of the vehicle plus 150 lbs. (or 70 kg.) for each designated seating position and appropriate allowance for cargo. Vehicles with tanks for water and/or LP gas must also account for the weight of these fluids in the cargo calculations.

## WEIGHT ANALYSIS WORKSHEET

(4-CORNER)

Enduser: West Virginia Class C	Date: 3/8/2021
VIN: 1FDVU4XG3LKB53559	Performed By: Jason Huizing

	Max # Of Ambulatory Passengers	Max # Of Wheelchairs	
	14		
OEM Wheelbase	OEM GVWR	OEM FRT GAWR	OEM RR GAWR
148"-EL	10360	4130	6725
Fuel Type	Engine Type	Payload Capacity	Unmodified Curb Weight
Gas	3.5L Eco	3095	3159      3789      6948
			Front      Rear      Total

	Lft-Frt (lbs)	Rt-Frt (lbs)	Lft-Rr (lbs)	Rt-Rr (lbs)	Total (lbs)
ACTUAL COMPLETED WEIGHT OF VEHICLE (UVW)	1380.35	1380.35	2324.80	2179.50	7265.00
WEIGHT OF THE OCCUPANTS (lbs)	483.00	483.00	588.00	546.00	2100.00
WEIGHT OF Full Tank Of Gas	44.10	33.08	45.68	34.65	157.50
ADJUSTED 4 CORNER WEIGHT	1907.45	1896.43	2958.48	2760.15	9522.50

**TOTAL FRONT**    3803.88                      326.13                      **TOTAL REAR**    5718.63                      1006.38  
 IS THE FRONT GAWR OVER    **NO**                      IS THE REAR GAWR OVER    **NO**

<b>PASS/FAIL Analysis</b>		Is Lft-Frt/2 Exceeded?	Is Rt-Frt/2 Exceeded?
Front GAWR (lbs.)	4130      divided by 2=	2065.00	<b>NO</b> <b>NO</b>
Rear GAWR (lbs.)	6725      divided by 2=	3362.50	<b>NO</b> <b>NO</b>
GVWR (lbs.)	10360	LOADED WEIGHT (lbs.)	<b>9522.50</b> <b>Is GVWR Exceeded?</b> <b>NO</b>
		837.50	
Maximum UVW from Tables A & B of the Incomplete Vehicle Manual (IVM) is		N/A lbs..	
(NOTE: UVW does not apply to certification of vehicles with a GVWR above 10,000 lbs.)			
The actual completed weight (UVW) of this vehicle is		7265.00 lbs.	Is Maximum UVW Exceeded? <b>NO</b>

**DEFINITIONS**

"UVW" - Completed weight of the vehicle with maximum capacity of all fluids necessary for operation of the vehicle, but without cargo, occupants or accessories that are normally removed when the vehicle is not in use.

"GAWR" and "GVWR" are found on the label affixed to the cover of the Incomplete Vehicle Manual (IVM).

"LOADED VEHICLE WEIGHT" - Completed weight of the vehicle with maximum capacities of all fluids necessary for operation of the vehicle plus 150 lbs. (or 70 kg.) for each designated seating position and appropriate allowance for cargo. Vehicles with tanks for water and/or LP gas must also account for the weight of these fluids in the cargo calculations.

Available Full Body Paint Colors Included in Classes G, H and I

2020 Ford Transit Exterior Color Paints:



## Graphic Films for Opaque Applications

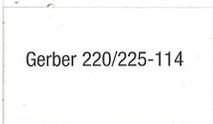
- 3M™ Scotchcal™ ElectroCut™ Graphic Film Series 7125, 7725, and 7725SE
- 3M™ Controltac™ Plus Graphic Film with Comply™ Adhesive Series 180C



**Satin Aluminum**  
180C-120  
7725-120, 7125-120  
PANTONE® 877 C



**Satin Gold**  
180C-131  
7725-131, 7125-131  
PANTONE 872 C



Gerber 220/225-114

**Transparent**  
180C-114  
7725-114, 7125-114



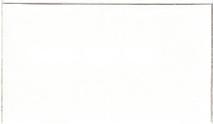
**White**  
180C-10



**White**  
7725-10, 7125-10



**Matte White**  
7725-20, 7125-20



**Eggshell**  
7725-130



**Antique White**  
7725-90, 7125-90



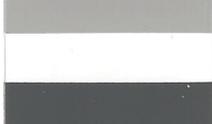
**Pearl Gray**  
7725-11, 7125-11  
PANTONE Cool  
Gray 2 C



**Medium Gray**  
180C-31  
7725-31, 7125-31  
PANTONE Cool  
Gray 7 C



**Dark Gray**  
180C-41  
7725-41, 7125-41



**Black**  
180C-12  
7725-12, 7125-12  
PANTONE Process  
Black C



**Matte Black**  
180C-22,  
7725-22, 7125-22,  
PANTONE Black C



**Deep Mahogany  
Brown**  
180C-19  
7725-19, 7125-19  
PANTONE 4625 C



**Russet Brown**  
7725-29, 7125-29  
PANTONE 175 C



**Saddle Brown**  
7725-139, 7125-139



**Tan**  
180C-39  
7725-39, 7125-39



**Putty**  
7725-59, 7125-59



**Sandstone**  
7725-89, 7125-89



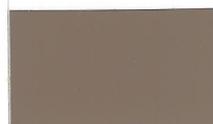
**Fawn**  
7725-99, 7125-99



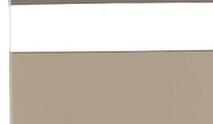
**Beige**  
180C-49  
7725-49, 7125-49



**Mauve**  
7725-193



**Salmon Pink**  
7725-173



**Magenta**  
7725-103, 7125-103  
PANTONE 205 C



**Process Magenta**  
7725-273  
PANTONE 214 C



**Perfect Match Red**  
7725-263, 7125-263  
PANTONE 186 C



**Tomato Red**  
180C-13  
7725-13, 7125-13  
PANTONE 1795 C



**Geranium**  
180C-63  
7725-63, 7125-63

**Deep Red**  
180C-23  
7725-23, 7125-23

**Cardinal Red**  
180C-53  
7725-53, 7125-53

**Burgundy**  
180C-58  
7725-58, 7125-58

**Terra Cotta**  
7725-24, 7125-24

**Bright Orange**  
180C-14  
7725-14, 7125-14  
PANTONE Orange  
021 C

**Apricot**  
7725-64

**Light Orange**  
180C-54  
7725-54, 7125-54

**Harvest Gold**  
7725-105, 7125-105  
PANTONE 7510 C

**Sunflower**  
180C-25  
7725-25, 7125-25  
PANTONE 1235 C



**Bright Yellow**  
180C-15  
7725-15, 7125-15  
PANTONE 109 C

**Vista Yellow**  
7725-85

**Apple Green**  
180C-196  
7725-196, 7125-196

**Kelly Green**  
180C-46  
7725-46, 7125-46

**Bright Green**  
180C-186  
7725-186, 7125-186  
PANTONE 348 C

**Dark Green**  
180C-56  
7725-56, 7125-56  
PANTONE 3425 C

**Bottle Green**  
7725-276, 7125-276

**Forest Green**  
7725-66, 7125-66  
PANTONE 3302 C

**Bermuda Blue**  
7725-357, 7125-357  
PANTONE 323 C

**Teal**  
180C-96  
7725-96, 7125-96  
PANTONE 322 C



**Dark Aqua**  
7725-307

**Aqua**  
7725-176

**Peacock Blue**  
180C-77  
7725-77, 7125-77  
PANTONE 298 C

**Robin Egg Blue**  
7725-86

**Olympic Blue**  
180C-57  
7725-57, 7125-57  
PANTONE 7461 C

**Intense Blue**  
180C-47  
7725-47, 7125-47  
PANTONE 301 C

**Vivid Blue**  
180C-17  
7725-17, 7125-17

**Sapphire Blue**  
180C-37  
7725-37, 7125-37  
PANTONE 2747 C

**Wedgewood Blue**  
7725-187

**Shadow Blue**  
7725-177, 7125-177

### Other Product Series:

Most colors are available in other product series.

### Can't find your color?

Allow us to custom match your color with our three-day, no-



**Light Navy**  
7725-197, 7125-197  
PANTONE 289 C



**Indigo**  
180C-27  
7725-27, 7125-27  
PANTONE 2767 C



**Royal Purple**  
180C-38  
7725-38, 7125-38



**Purple**  
7725-48, 7125-48



**Dark Violet**  
7725-98



**Violet**  
7725-88

**Metallic Graphic Film**



**Sage Green Metallic**  
180C-216



**Dark Blue Metallic**  
180C-217



**Bright Blue Metallic**  
180C-227



**Silver Blue Metallic**  
180C-237



**Light Silver Metallic**  
180C-220  
PANTONE 877 C



**Slate Metallic**  
180C-201



**Gray Metallic**  
180C-221



**Charcoal Metallic**  
180C-211



**Dark Burgundy Metallic**  
180C-228



**Gold Metallic**  
180C-241



**Copper Metallic**  
180C-229

**Fluorescent Graphic Film**



**Yellow-Orange**  
7725SE-404



**Red-Orange**  
7725SE-414



**Fuchsia**  
7725SE-413



**Yellow**  
7725SE-405



**Green**  
7725SE-406

**Films for application to opaque surfaces**

The components used in sign construction, including sources of illumination, adhesives and substrates, affect color. Although color variation is usually slight, certain components have a more obvious effect, particularly with shades of white. PANTONE® color numbers are based on reflective light measurements of product samples applied to a standard white substrate.

9  
9  
9  
103  
a  
ed 263  
3